

# CANON TRIANGVLORVM

Sive Tabulæ

## SINVVM & TANGENTIVM

artificialium, ad Radium 10000,0000,  
& ad scrupula prima Quadrantis.

Per EDM. GYNTER Professorem Astronomiæ  
in Collegio Greshamensi.

*W. L. W. 3013*



*Consolins*

*Excudebat G. W. Iones*

LONDINI,

Excudebat GVLIELMVS IONES.

1623.

**HONORATISSIMO**

**DOMINO Dn. IOHANNI  
COMITI de BRIDGEWATER,  
VICECOMITI de BRACKLEY,  
BARONI de ELLESMERE,**

**Hunc suum Canonem  
Triangulorum**

**D. D. D.**

**EDM. GUNTER.**



## Descriptio Canonis.

**C**ANON noster sex habet columnas, lineolis à se invicem distinctas. Quarum prima est arcuum ab 0, in 45 *Gr.* sexta arcuum à 45 *Gr.* in Quadrantem; reliquæ quatuor intermedix continent *Sinus* & *Tangentes* horum arcuum. Sunt autem *Sinus* nostri non semisses subtensarum, & *Tangentes* non perpendiculares ab extremitate Diametri: sed numeri proprij eorum loco substituti, quos propterea cum primo inventore Domino *Merchistonij* artificiales dicimus. Atque ita secunda columna & quarta continent *Sinus* & *Tangentes* arcuum primæ columnæ, tertia columna & quinta *Sinus* & *Tangentes* arcuum sextæ columnæ.

Vt si quærat *Sinus* artificialis nostræ latitudinis quæ *Londoni* est *Gr.* 51. *M.* 32. invenies *Sinum* 51 in ima parte paginæ, & minuta 32 in sexta columna, communis angulus dat 9893, 7452 pro *Sinu* quæsito, cui in eadem linea responder *Sinus* complementi 9793, 8317, quem brevitatis causa *Cosinum* dicimus. Similiter *Tangens* *Gr.* 51. *M.* 32. est 10099, 9134, & *Cotangens* 9900, 0865.

*Secantes* (quoties vsus postulat) suppleri poterunt auferendo *Cosinum* è duplo *Radij*.

Vt cum duplum *Radij* sit 20000, 0000

Hinc aufer *Cosinum* *Gr.* 51. *M.* 32. 9793, 8317

Fiet *Secans* *Gr.* 51. *M.* 32. 10206, 1683

Eodem modo & *Sinus versi* addendo 301, 0300 duplo *Sinus* semiarcus, & auferendo *Radium*.

Vt cum *Gr.* 51. *M.* 32. semi-arcus sit *Gr.* 25. *M.* 46.

Addatur *Sinui* *Gr.* 25. *M.* 46. 9638, 1968

Idem *Sinus* rursum, & prior 9638, 1968

Numerus; ita *Radio* sublato 301, 0300. *leg. 2.*

Fiet *Sinus versus* *Gr.* 51. *M.* 32. 9577, 4236

æqualis *Sinui* recto *Gr.* 22. *M.* 12. *S.* 22.

M	Sim. o.		Tan. o.	Infinitum.	
0	0	10000,0000	0		60
1	6463,7260	9999,9999	6463,7260	13536,2739	59
2	6764,7560	9999,9999	6764,7561	13235,2438	58
3	6940,8473	9999,9998	6940,8474	13059,1525	57
4	7065,7860	9999,9997	7065,7863	12934,2136	56
5	7162,6959	9999,9995	7162,6964	12837,3035	55
6	7241,8771	9999,9993	7241,8778	12758,1221	54
7	7308,8238	9999,9991	7308,8247	12691,1752	53
8	7366,8157	9999,9988	7366,8169	12633,1831	52
9	7417,9681	9999,9985	7417,9696	12582,0303	51
10	7463,7255	9999,9981	7463,7273	12536,2726	50
11	7505,1180	9999,9977	7505,1202	12494,8797	49
12	7542,9064	9999,9973	7542,9091	12457,0908	48
13	7577,6684	9999,9969	7577,6715	12422,3284	47
14	7609,8529	9999,9964	7609,8565	12390,1434	46
15	7639,8160	9999,9958	7639,8201	12360,1798	45
16	7667,8445	9999,9953	7667,8492	12332,1507	44
17	7694,1732	9999,9947	7694,1785	12305,8214	43
18	7718,9966	9999,9940	7718,0026	12281,9974	42
19	7742,4775	9999,9933	7742,4841	12257,5158	41
20	7764,7536	9999,9926	7764,7610	12235,2389	40
21	7785,9427	9999,9919	7785,9508	12214,0491	39
22	7806,1458	9999,9911	7806,1547	12193,8452	38
23	7825,4507	9999,9902	7825,4604	12174,5395	37
24	7843,9338	9999,9894	7843,9444	12156,0555	36
25	7861,6623	9999,9885	7861,6738	12138,3262	35
26	7878,6953	9999,9875	7878,7077	12121,2922	34
27	7895,0854	9999,9865	7895,0988	12104,9012	33
28	7910,8793	9999,9856	7910,8937	12089,1062	32
29	7926,1189	9999,9845	7926,1344	12073,8656	31
30	7940,8418	9999,9834	7940,8584	12059,1416	30
	Sim. 89.			Tan. 89.	M

M	Sin. o.		Tan. o.		
30	7940,8418	9999,9834	7940,8584	12059,1416	30
31	7955,0819	9999,9823	7955,0996	12044,9004	29
32	7968,8698	9999,9812	7968,8886	12031,1113	28
33	7982,2333	9999,9800	7982,2534	12017,7466	27
34	7995,1979	9999,9787	7995,2192	12004,7808	26
35	8007,7866	9999,9774	8007,8091	11992,1908	25
36	8020,0206	9999,9761	8020,0445	11979,9555	24
37	8031,9194	9999,9748	8031,9446	11968,0553	23
38	8043,5008	9999,9734	8043,5274	11956,4726	22
39	8054,7814	9999,9720	8054,8193	11945,1806	21
40	8065,7763	9999,9706	8065,8057	11934,1942	20
41	8076,4996	9999,9691	8076,5305	11923,4694	19
42	8086,9646	9999,9675	8086,9970	11913,0029	18
43	8097,1832	9999,9660	8097,2172	11902,7827	17
44	8107,1669	9999,9644	8107,2025	11892,7975	16
45	8116,9262	9999,9628	8116,9634	11883,0365	15
46	8126,4709	9999,9611	8126,5098	11873,4901	14
47	8135,8104	9999,9594	8135,8510	11864,1489	13
48	8144,9532	9999,9576	8144,9955	11855,0044	12
49	8153,9075	9999,9558	8153,9516	11846,0483	11
50	8162,6808	9999,9540	8162,7367	11837,2632	10
51	8171,2803	9999,9522	8171,3281	11828,6718	9
52	8179,7129	9999,9503	8179,7626	11820,2374	8
53	8187,9847	9999,9484	8188,0363	11811,9636	7
54	8196,1020	9999,9464	8196,1555	11803,8444	6
55	8204,0702	9999,9444	8204,1258	11795,8741	5
56	8211,8949	9999,9423	8211,9525	11788,0474	4
57	8219,5810	9999,9403	8219,6407	11780,3592	3
58	8227,1335	9999,9382	8227,1953	11772,8046	2
59	8234,5568	9999,9360	8234,6207	11765,3792	1
60	8241,8553	9999,9338	8241,9214	11758,0785	0
		Sin. 89.		Tan. 89.	M

M	Sin. I.	
0	8241,8553	9999,9338
1	8249,0331	9999,9316
2	8256,0942	9999,9293
3	8263,0423	9999,9270
4	8269,8810	9999,9247
5	8276,6136	9999,9223
6	8283,2433	9999,9199
7	8289,7734	9999,9175
8	8296,2067	9999,9150
9	8302,5460	9999,9125
10	8308,7941	9999,9099
11	8314,9535	9999,9073
12	8321,0268	9999,9047
13	8327,0163	9999,9020
14	8332,9243	9999,8993
15	8338,7529	9999,8966
16	8344,5043	9999,8938
17	8350,1805	9999,8910
18	8355,7834	9999,8882
19	8361,3149	9999,8853
20	8366,7769	9999,8823
21	8372,1709	9999,8794
22	8377,4988	9999,8764
23	8382,7620	9999,8734
24	8387,9621	9999,8703
25	8393,1007	9999,8672
26	8398,1792	9999,8641
27	8403,1990	9999,8609
28	8408,1613	9999,8576
29	8413,0676	9999,8544
30	8417,9190	9999,8511
	Sin. 88.	

Tan. I.		
8241,9214	11758,0785	60
8249,1015	11750,8984	59
8256,1649	11743,8351	58
8263,1152	11736,8847	57
8269,9562	11730,0437	56
8276,6912	11723,3087	55
8283,3234	11716,6765	54
8289,8559	11710,1440	53
8296,2916	11703,7083	52
8302,6335	11697,3664	51
8308,8842	11691,1158	50
8315,0462	11684,9537	49
8321,1221	11678,8778	48
8327,1142	11672,8857	47
8333,0249	11666,9750	46
8338,8563	11661,1437	45
8344,6104	11655,3895	44
8350,2894	11649,7105	43
8355,8952	11644,1047	42
8361,4296	11638,5703	41
8366,8945	11633,1054	40
8372,2915	11627,7084	39
8377,6223	11622,3776	38
8382,8886	11617,1113	37
8388,0918	11611,9081	36
8393,2335	11606,7664	35
8398,3151	11601,6848	34
8403,3381	11596,6619	33
8408,3036	11591,6963	32
8413,2131	11586,7868	31
8418,0678	11581,9321	30
	Tan. 88.	
		M



M	Sin. 1.		Tan. 1.	
30	8417,9190	9999,8511	8418,0678	11581,9321 30
31	8422,7168	9999,8478	8422,8689	11577,1310 29
32	8427,4621	9999,8444	8427,6176	11572,3823 28
33	8432,1561	9999,8410	8432,3150	11567,6849 27
34	8436,7998	9999,8376	8436,9622	11563,0377 26
35	8441,3944	9999,8341	8441,5603	11558,4397 25
36	8445,9409	9999,8306	8446,1102	11553,8897 24
37	8450,4402	9999,8271	8450,6131	11549,3868 23
38	8454,8933	9999,8235	8455,0698	11544,9301 22
39	8459,3012	9999,8199	8459,4814	11540,5186 21
40	8463,6648	9999,8162	8463,8486	11536,1513 20
41	8467,9850	9999,8125	8468,1724	11531,8275 19
42	8472,2625	9999,8088	8472,4537	11527,5462 18
43	8476,4983	9999,8050	8476,6933	11523,3066 17
44	8480,6932	9999,8012	8480,8919	11519,1080 16
45	8484,8478	9999,7974	8485,0505	11514,9495 15
46	8488,9631	9999,7935	8489,1696	11510,8303 14
47	8493,0397	9999,7896	8493,2501	11506,7498 13
48	8497,0784	9999,7856	8497,2927	11502,7072 12
49	8501,0798	9999,7816	8501,2981	11498,7018 11
50	8505,0446	9999,7776	8505,2670	11494,7329 10
51	8508,9736	9999,7735	8509,2000	11490,7999 9
52	8512,8673	9999,7694	8513,0978	11486,9021 8
53	8516,7263	9999,7653	8516,9610	11483,0389 7
54	8520,5513	9999,7611	8520,7902	11479,2098 6
55	8524,3429	9999,7569	8524,5850	11475,4140 5
56	8528,1016	9999,7527	8528,3489	11471,6510 4
57	8531,8281	9999,7484	8532,0797	11467,9203 3
58	8535,5228	9999,7441	8535,7787	11464,2212 2
59	8539,1863	9999,7397	8539,4466	11460,5534 1
60	8542,8191	9999,7353	8543,0838	11456,9162 0
		Sin. 88.		Tan. 88. M



M	Sin. 2.		Tan. 2.		
0	8542,8191	9999,7353	8543,0838	11456,9162	60
1	8546,4217	9999,7309	8546,6908	11453,3091	59
2	8549,9947	9999,7264	8550,2683	11449,7317	58
3	8553,5385	9999,7219	8553,8166	11446,1834	57
4	8557,0536	9999,7174	8557,3362	11442,6637	56
5	8560,5404	9999,7128	8560,8276	11439,1724	55
6	8563,9994	9999,7082	8564,2912	11435,7088	54
7	8567,4310	9999,7035	8567,7274	11432,2725	53
8	8570,8357	9999,6988	8571,1368	11428,8631	52
9	8574,2139	9999,6941	8574,5197	11425,4802	51
10	8577,5659	9999,6894	8577,8765	11422,1234	50
11	8580,8923	9999,6846	8581,2076	11418,7923	49
12	8584,1933	9999,6797	8584,5135	11415,4864	48
13	8587,4694	9999,6749	8587,7945	11412,2054	47
14	8590,7209	9999,6700	8591,0509	11408,9490	46
15	8593,9482	9999,6650	8594,2832	11405,7167	45
16	8597,1517	9999,6600	8597,4916	11402,5083	44
17	8600,3317	9999,6550	8600,6766	11399,3233	43
18	8603,4885	9999,6499	8603,8385	11396,1614	42
19	8606,6225	9999,6449	8606,9776	11393,0223	41
20	8609,7341	9999,6397	8610,0943	11389,9056	40
21	8612,8234	9999,6346	8613,1888	11386,8111	39
22	8615,8909	9999,6294	8616,2615	11383,7384	38
23	8618,9369	9999,6241	8619,3127	11380,6872	37
24	8621,9616	9999,6188	8622,3427	11377,6572	36
25	8624,9653	9999,6135	8625,3517	11374,6482	35
26	8627,9484	9999,6082	8628,3402	11371,6598	34
27	8630,9111	9999,6028	8631,3082	11368,6917	33
28	8633,8536	9999,5974	8634,2562	11365,7437	32
29	8636,7764	9999,5919	8637,1844	11362,8155	31
30	8639,6795	9999,5864	8640,0931	11359,9068	30
	Sin. 87.			Tan. 87. M	

M	Sin. 2.		Tan. 2.		
30	8639,6795	9999,5864	8640,0931	11359,9068	30
31	8642,5634	9999,5809	8642,9825	11357,0175	29
32	8645,4282	9999,5753	8645,8528	11354,1471	28
33	8648,2741	9999,5697	8648,7044	11351,2955	27
34	8651,1015	9999,5640	8651,5375	11348,4625	26
35	8653,9106	9999,5584	8654,3522	11345,6477	25
36	8656,7016	9999,5527	8657,1489	11342,8510	24
37	8659,4748	9999,5469	8659,9278	11340,0721	23
38	8662,2303	9999,5411	8662,6891	11337,3108	22
39	8664,9684	9999,5353	8665,4330	11334,5669	21
40	8667,6893	9999,5294	8668,1598	11331,8401	20
41	8670,3932	9999,5235	8670,8696	11329,1303	19
42	8673,0803	9999,5176	8673,5627	11326,4372	18
43	8675,7510	9999,5116	8676,2393	11323,7606	17
44	8678,4052	9999,5056	8678,8996	11321,1009	16
45	8681,0433	9999,4995	8681,5437	11318,4562	15
46	8683,6654	9999,4934	8684,1719	11315,8280	14
47	8686,2717	9999,4873	8686,7844	11313,2155	13
48	8688,8625	9999,4812	8689,3813	11310,6186	12
49	8691,4378	9999,4750	8691,9628	11308,0371	11
50	8693,9980	9999,4687	8694,5292	11305,4707	10
51	8696,5431	9999,4625	8697,0806	11302,9193	9
52	8699,0733	9999,4561	8699,6171	11300,3828	8
53	8701,5889	9999,4498	8702,1390	11297,8609	7
54	8704,0899	9999,4434	8704,6464	11295,3535	6
55	8706,5765	9999,4370	8707,1395	11292,8604	5
56	8709,0490	9999,4306	8709,6184	11290,3815	4
57	8711,5074	9999,4241	8712,0833	11287,9166	3
58	8713,9520	9999,4175	8714,5345	11285,4655	2
59	8716,3829	9999,4110	8716,9719	11283,0281	1
60	8718,8001	9999,4044	8719,3957	11280,6042	0
	Sin. 87.			Tan. 87.	M

M	Sin. 3.		Tan. 3.		
0	8718,8001	9999,4044	8719,3957	11280,6042	60
1	8721,2040	9999,3977	8721,8062	11278,1937	59
2	8723,5946	9999,3910	8724,2035	11275,7964	58
3	8725,9720	9999,3843	8726,5877	11273,4123	57
4	8728,3365	9999,3776	8728,9589	11271,0410	56
5	8730,6882	9999,3708	8731,3173	11268,6826	55
6	8733,0271	9999,3640	8733,6631	11266,3368	54
7	8735,3535	9999,3571	8735,9964	11264,0036	53
8	8737,6674	9999,3502	8738,3172	11261,6827	52
9	8739,9691	9999,3433	8740,6258	11259,3742	51
10	8742,2586	9999,3363	8742,9222	11257,0777	50
11	8744,5360	9999,3293	8745,2066	11254,7933	49
12	8746,8015	9999,3223	8747,4792	11252,5207	48
13	8749,0552	9999,3152	8749,7400	11250,2599	47
14	8751,2973	9999,3081	8751,9892	11248,0107	46
15	8753,5278	9999,3009	8754,2268	11245,7731	45
16	8755,7468	9999,2937	8756,4531	11243,5468	44
17	8757,9546	9999,2865	8758,6681	11241,3319	43
18	8760,1511	9999,2792	8760,8719	11239,1280	42
19	8762,3366	9999,2719	8763,0646	11236,9353	41
20	8764,5111	9999,2646	8765,2464	11234,7535	40
21	8766,6747	9999,2572	8767,4174	11232,5825	39
22	8768,8275	9999,2498	8769,5777	11230,4222	38
23	8770,9697	9999,2423	8771,7273	11228,2726	37
24	8773,1013	9999,2349	8773,8664	11226,1335	36
25	8775,2225	9999,2273	8775,9952	11224,0048	35
26	8777,3334	9999,2198	8778,1135	11221,8864	34
27	8779,4340	9999,2122	8780,2217	11219,7782	33
28	8781,5244	9999,2045	8782,3198	11217,6801	32
29	8783,6048	9999,1969	8784,4079	11215,5920	31
30	8785,6752	9999,1892	8786,4860	11213,5139	30
		Sin. 86		Tan. 86.	M

M	Sin. 3.		Tan. 3.		M
30	8785,6752	9999,1892	8786,4860	11213,5139	30
31	8787,7358	9999,1814	8788,5544	11211,4455	29
32	8789,7866	9999,1736	8790,6130	11209,3869	28
33	8791,8278	9999,1658	8792,6619	11207,3380	27
34	8793,8593	9999,1580	8794,7013	11205,2986	26
35	8795,8814	9999,1501	8796,7313	11203,2686	25
36	8797,8940	9999,1421	8798,7519	11201,2480	24
37	8799,8974	9999,1342	8800,7632	11199,2368	23
38	8801,8915	9999,1262	8802,7653	11197,2347	22
39	8803,8764	9999,1181	8804,7582	11195,2417	21
40	8805,8523	9999,1100	8806,7422	11193,2577	20
41	8807,8192	9999,1019	8808,7172	11191,2827	19
42	8809,7772	9999,0938	8810,6834	11189,3166	18
43	8811,7263	9999,0856	8812,6407	11187,3592	17
44	8813,6667	9999,0774	8814,5893	11185,4106	16
45	8815,5985	9999,0691	8816,5293	11183,4706	15
46	8817,5216	9999,0608	8818,4608	11181,5391	14
47	8819,4363	9999,0525	8820,3838	11179,6161	13
48	8821,3425	9999,0441	8822,2984	11177,7016	12
49	8823,2403	9999,0357	8824,2046	11175,7953	11
50	8825,1299	9999,0272	8826,1026	11173,8973	10
51	8827,0112	9999,0188	8827,9924	11172,0075	9
52	8828,8843	9999,0102	8829,8741	11170,1258	8
53	8830,7494	9999,0017	8831,7477	11168,2522	7
54	8832,6065	9998,9931	8833,6134	11166,3865	6
55	8834,4557	9998,9844	8835,4712	11164,5287	5
56	8836,2969	9998,9758	8837,3211	11162,6788	4
57	8838,1304	9998,9671	8839,1632	11160,8367	3
58	8839,9560	9998,9583	8840,9977	11159,0022	2
59	8841,7741	9998,9496	8842,8245	11157,1754	1
60	8843,5845	9998,9407	8844,6437	11155,3562	0
		Sin. 86.		Tan. 86.	M



M	Sin. 4.		Tan. 4.		
0	8843,5845	9998,9408	8844,6437	11155,3562	60
1	8845,3873	9998,9319	8846,4554	11153,5445	59
2	8847,1827	9998,9230	8848,2597	11151,7403	58
3	8848,9706	9998,9141	8850,0555	11149,9434	57
4	8850,7512	9998,9051	8851,8450	11148,1539	56
5	8852,5245	9998,8961	8853,6283	11146,3716	55
6	8854,2905	9998,8871	8855,4034	11144,5966	54
7	8856,0493	9998,8780	8857,1713	11142,8286	53
8	8857,8010	9998,8689	8858,9321	11141,0678	52
9	8859,5456	9998,8597	8860,6858	11139,3141	51
10	8861,2832	9998,8506	8862,4326	11137,5673	50
11	8863,0139	9998,8413	8864,1725	11135,8274	49
12	8864,7376	9998,8321	8865,9055	11134,0944	48
13	8866,4545	9998,8228	8867,6317	11132,3682	47
14	8868,1646	9998,8135	8869,3511	11130,6488	46
15	8869,8679	9998,8041	8871,0638	11128,9361	45
16	8871,5646	9998,7947	8872,7699	11127,2300	44
17	8873,2546	9998,7852	8874,4693	11125,5306	43
18	8874,9380	9998,7758	8876,1622	11123,8377	42
19	8876,6149	9998,7662	8877,8487	11122,1513	41
20	8878,2853	9998,7567	8879,5286	11120,4713	40
21	8879,9493	9998,7471	8881,2022	11118,7978	39
22	8881,6069	9998,7375	8882,8694	11117,1305	38
23	8883,2581	9998,7278	8884,5303	11115,4696	37
24	8884,9031	9998,7181	8886,1849	11113,8150	36
25	8886,5418	9998,7083	8887,8334	11112,1665	35
26	8888,1743	9998,6986	8889,4756	11110,5243	34
27	8889,8006	9998,6888	8891,1118	11108,8881	33
28	8891,4209	9998,6789	8892,7420	11107,2580	32
29	8893,0351	9998,6690	8894,3660	11105,6339	31
30	8894,6433	9998,6591	8895,9841	11104,0138	30
		Sin. 85.		Tan. 85.	M



M	Sin. 4.		Tan. 4.		
30	8894,6433	9998,6591	8895,9841	11104,0158	20
31	8896,2455	9998,6492	8897,5963	11102,4036	29
32	8897,8417	9998,6391	8899,2026	11100,7973	28
33	8899,4322	9998,6291	8900,8030	11099,1969	27
34	8901,0167	9998,6190	8902,3977	11097,6022	26
35	8902,5955	9998,6089	8903,9866	11096,0134	25
36	8904,1685	9998,5988	8905,5697	11094,4302	24
37	8905,7358	9998,5886	8907,1472	11092,8527	23
38	8907,2974	9998,5784	8908,7190	11091,2809	22
39	8908,8534	9998,5681	8910,2853	11089,7146	21
40	8910,4038	9998,5578	8911,8460	11088,1539	20
41	8911,9487	9998,5475	8913,4012	11086,5988	19
42	8913,4880	9998,5371	8914,9508	11085,0491	18
43	8915,0219	9998,5267	8916,4951	11083,5048	17
44	8916,5503	9998,5163	8918,0340	11081,9659	16
45	8918,0733	9998,5058	8919,5675	11080,4324	15
46	8919,5910	9998,4953	8921,0957	11078,9042	14
47	8921,1034	9998,4847	8922,6186	11077,3813	13
48	8922,6104	9998,4742	8924,1362	11075,8637	12
49	8924,1122	9998,4635	8925,6487	11074,3512	11
50	8925,6089	9998,4528	8927,1561	11072,8439	10
51	8927,1003	9998,4422	8928,6581	11071,3418	9
52	8928,5866	9998,4314	8930,1551	11069,8448	8
53	8930,0678	9998,4206	8931,6471	11068,3528	7
54	8931,5439	9998,4098	8933,1340	11066,8659	6
55	8933,0150	9998,3990	8934,6160	11065,3840	5
56	8934,4810	9998,3881	8936,0929	11063,9070	4
57	8935,9421	9998,3772	8937,5649	11062,4350	3
58	8937,3983	9998,3662	8939,0321	11060,9678	2
59	8938,8496	9998,3552	8940,4943	11059,5056	1
60	8940,2960	9998,3442	8941,9517	11058,0482	0
		Sin. 85.		Tan. 85.	M

M	Sin. 5.		Tan. 5.		
0	8940,2960	9998,3442	8941,9517	11058,0482	60
1	8941,7375	9998,3331	8943,4044	11056,5955	59
2	8943,1743	9998,3220	8944,8522	11055,1477	58
3	8944,6063	9998,3109	8946,2954	11053,7046	57
4	8946,0335	9998,2997	8947,7338	11052,2661	56
5	8947,4560	9998,2885	8949,1675	11050,8324	55
6	8948,8739	9998,2772	8950,5966	11049,4033	54
7	8950,2871	9998,2659	8952,0211	11047,9788	53
8	8951,6956	9998,2546	8953,4410	11046,5589	52
9	8953,0996	9998,2432	8954,8564	11045,1436	51
10	8954,4990	9998,2318	8956,2672	11043,7327	50
11	8955,8939	9998,2204	8957,6735	11042,3264	49
12	8957,2843	9998,2089	8959,0754	11040,9245	48
13	8958,6702	9998,1974	8960,4728	11039,5271	47
14	8960,0517	9998,1858	8961,8658	11038,1341	46
15	8961,4287	9998,1742	8963,2544	11036,7455	45
16	8962,8013	9998,1626	8964,6387	11035,3612	44
17	8964,1696	9998,1509	8966,0187	11033,9812	43
18	8965,5337	9998,1392	8967,3944	11032,6055	42
19	8966,8934	9998,1275	8968,7658	11031,2341	41
20	8968,2488	9998,1157	8970,1330	11029,8669	40
21	8969,5998	9998,1039	8971,4949	11028,5050	39
22	8970,9467	9998,0921	8972,8546	11027,1453	38
23	8972,2894	9998,0802	8974,2092	11025,7907	37
24	8973,6280	9998,0683	8975,5597	11024,4402	36
25	8974,9624	9998,0563	8976,9060	11023,0939	35
26	8976,2926	9998,0443	8978,2483	11021,7516	34
27	8977,6187	9998,0323	8979,5864	11020,4135	33
28	8978,9408	9998,0202	8980,9206	11019,0793	32
29	8980,2588	9998,0081	8982,2507	11017,7492	31
30	8981,5728	9997,9959	8983,5769	11016,4230	30
		Sin. 84.		Tan. 84.	M

M	Sin. 5.		Tan. 5.		
30	8981,5728	9997,9959	8983,5769	11016,4230	30
31	8982,8329	9997,9338	8984,8991	11015,1008	29
32	8984,1889	9997,9715	8985,2173	11013,7826	28
33	8985,4909	9997,9593	8987,5316	11012,4683	27
34	8986,7820	9997,9470	8988,8420	11011,1579	26
35	8988,0833	9997,9347	8990,1486	11009,8513	25
36	8989,3737	9997,9223	8991,4513	11008,5485	24
37	8990,6602	9997,9099	8992,7503	11007,2496	23
38	8991,9429	9997,8974	8994,0454	11005,9545	22
39	8993,2217	9997,8850	8995,3357	11004,6632	21
40	8994,4967	9997,8725	8996,6243	11003,3757	20
41	8995,7680	9997,8599	8997,9081	11002,0918	19
42	8997,0356	9997,8473	8999,1883	11000,8117	18
43	8998,2994	9997,8347	9000,4648	10999,5352	17
44	8999,5595	9997,8220	9001,7375	10998,2624	16
45	9000,8159	9997,8093	9003,0066	10996,9933	15
46	9002,0687	9997,7965	9004,2721	10995,7278	14
47	9003,3178	9997,7838	9005,5340	10994,4659	13
48	9004,5633	9997,7710	9006,7923	10993,2076	12
49	9005,8053	9997,7581	9008,0472	10991,9528	11
50	9007,0436	9997,7452	9009,2984	10990,7016	10
51	9008,2784	9997,7323	9010,5461	10989,4539	9
52	9009,5096	9997,7193	9011,7902	10988,2097	8
53	9010,7373	9997,7063	9013,0310	10986,9690	7
54	9011,9615	9997,6933	9014,2682	10985,7317	6
55	9013,1823	9997,6802	9015,5021	10984,4979	5
56	9014,3996	9997,6671	9016,7325	10983,2675	4
57	9015,6134	9997,6540	9017,9594	10982,0405	3
58	9016,8238	9997,6408	9019,1830	10980,8169	2
59	9018,0309	9997,6276	9020,4033	10979,5967	1
60	9019,2345	9997,6143	9021,6202	10978,3797	0
		Sin. 84.		Tan. 84.	M

M	Sin. 6.		Tan. 6.		
0	9019,2345	9997,6143	9021,6202	10978,3797	60
1	9020,4348	9997,6010	9022,8338	10977,1662	59
2	9021,6317	9997,5877	9024,0440	10975,9559	58
3	9022,8254	9997,5743	9025,2510	10974,7489	57
4	9024,0157	9997,5609	9026,4548	10973,5452	56
5	9025,2027	9997,5475	9027,6552	10972,3447	55
6	9026,3864	9997,5340	9028,8524	10971,1475	54
7	9027,5669	9997,5204	9030,0464	10969,9535	53
8	9028,7441	9997,5069	9031,2372	10968,7627	52
9	9029,9182	9997,4933	9032,4249	10967,5751	51
10	9031,0890	9997,4797	9033,6094	10966,3906	50
11	9032,2567	9997,4660	9034,7906	10965,2093	49
12	9033,4211	9997,4523	9035,9688	10964,0311	48
13	9034,5824	9997,4386	9037,1439	10962,8561	47
14	9035,7406	9997,4248	9038,3158	10961,6841	46
15	9036,8957	9997,4110	9039,4848	10960,5152	45
16	9038,0477	9997,3971	9040,6506	10959,3493	44
17	9039,1966	9997,3832	9041,8134	10958,1866	43
18	9040,3424	9997,3693	9042,9731	10957,0268	42
19	9041,4852	9997,3553	9044,1298	10955,8701	41
20	9042,6249	9997,3413	9045,2836	10954,7164	40
21	9043,7616	9997,3273	9046,4343	10953,5656	39
22	9044,8954	9997,3132	9047,5821	10952,4178	38
23	9046,0261	9997,2991	9048,7270	10951,2730	37
24	9047,1538	9997,2849	9049,8689	10950,1311	36
25	9048,2786	9997,2707	9051,0078	10948,9921	35
26	9049,4004	9997,2565	9052,1439	10947,8560	34
27	9050,5194	9997,2423	9053,2771	10946,7228	33
28	9051,6354	9997,2279	9054,4075	10945,5925	32
29	9052,7485	9997,2136	9055,5349	10944,4651	31
30	9053,8587	9997,1992	9056,6595	10943,3405	30
		Sin. 83.		Tan. 83.	M



M	Sin. 6.		Tan. 6.		
30	9053,8587	9997,1992	9056,6594	10943,3405	30
31	9054,9661	9997,1848	9057,7812	10942,2187	29
32	9056,0706	9997,1704	9058,9002	10941,0998	28
33	9057,1723	9997,1559	9060,0164	10939,9836	27
34	9058,2711	9997,1414	9061,1297	10938,8702	26
35	9059,3672	9997,1268	9062,2404	10937,7556	25
36	9060,4604	9997,1122	9063,3482	10936,6518	24
37	9061,5508	9997,0976	9064,4532	10935,5467	23
38	9062,6385	9997,0829	9065,5556	10934,4444	22
39	9063,7235	9997,0682	9066,6553	10933,3447	21
40	9064,8057	9997,0534	9067,7522	10932,2477	20
41	9065,8852	9997,0387	9068,8465	10931,1534	19
42	9066,9619	9997,0238	9069,9381	10930,0619	18
43	9068,0359	9997,0090	9071,0269	10928,9730	17
44	9069,1073	9996,9941	9072,1132	10927,8867	16
45	9070,1760	9996,9791	9073,1969	10926,8031	15
46	9071,2421	9996,9642	9074,2779	10925,7220	14
47	9072,3055	9996,9492	9075,3563	10924,6436	13
48	9073,3662	9996,9341	9076,4321	10923,5679	12
49	9074,4243	9996,9191	9077,5053	10922,4947	11
50	9075,4799	9996,9039	9078,5759	10921,4240	10
51	9076,5328	9996,8888	9079,6440	10920,3559	9
52	9077,5832	9996,8736	9080,7096	10919,2903	8
53	9078,6310	9996,8583	9081,7726	10918,2273	7
54	9079,6762	9996,8431	9082,8331	10917,1669	6
55	9080,7188	9996,8278	9083,8910	10916,1089	5
56	9081,7590	9996,8124	9084,9466	10915,0534	4
57	9082,7966	9996,7970	9085,9995	10914,0004	3
58	9083,8317	9996,7816	9087,0500	10912,9499	2
59	9084,8643	9996,7662	9088,0981	10911,9018	1
60	9085,8944	9996,7507	9089,1437	10910,8562	0
	Sin. 83.			Tan. 83.	M



M	Sin. 7.		Tan. 7.		
0	9085,8944	9996,7507	9089,1437	10910,8562	60
1	9086,2221	9996,7351	9090,1869	10909,8130	59
2	9087,9473	9996,7196	9091,2277	10908,7723	58
3	9088,9700	9996,7040	9092,2660	10907,7339	57
4	9089,9903	9996,6883	9093,3020	10906,6980	56
5	9091,0082	9996,6727	9094,3355	10905,6644	55
6	9092,0236	9996,6569	9095,3667	10904,6333	54
7	9093,0367	9996,6412	9096,3955	10903,6045	53
8	9094,0473	9996,6254	9097,4219	10902,5780	52
9	9095,0556	9996,6096	9098,4460	10901,5539	51
10	9096,0615	9996,5937	9099,4678	10900,5322	50
11	9097,0650	9996,5778	9100,4872	10899,5127	49
12	9098,0662	9996,5619	9101,5043	10898,4956	48
13	9099,0651	9996,5459	9102,5192	10897,4808	47
14	9100,0616	9996,5299	9103,5317	10896,4682	46
15	9101,0558	9996,5138	9104,5420	10895,4580	45
16	9102,0477	9996,4977	9105,5500	10894,4500	44
17	9103,0373	9996,4816	9106,5557	10893,4443	43
18	9104,0246	9996,4654	9107,5591	10892,4408	42
19	9105,0096	9996,4492	9108,5604	10891,4395	41
20	9105,9924	9996,4330	9109,5594	10890,4405	40
21	9106,9729	9996,4167	9110,5562	10889,4438	39
22	9107,9511	9996,4004	9111,5507	10888,4492	38
23	9108,9272	9996,3840	9112,5431	10887,4568	37
24	9109,9010	9996,3677	9113,5333	10886,4666	36
25	9110,8726	9996,3512	9114,5214	10885,4786	35
26	9111,8420	9996,3348	9115,5072	10884,4928	34
27	9112,8091	9996,3183	9116,4908	10883,5091	33
28	9113,7741	9996,3017	9117,4724	10882,5275	32
29	9114,7370	9996,2851	9118,4518	10881,5481	31
30	9115,6976	9996,2685	9119,4291	10880,5709	30
		Sin. 82.		Tan. 82.	M

M	Sin. 7.		Tan. 7.		
30	9115,6976	9996,2685	9119,4291	10880,5709	30
31	9116,6561	9996,2519	9120,4042	10879,5957	29
32	9117,6125	9996,2352	9121,3773	10878,6227	28
33	9118,5667	9996,2185	9122,3482	10877,6517	27
34	9119,5188	9996,2017	9123,3171	10876,6829	26
35	9120,4688	9996,1849	9124,2838	10875,7161	25
36	9121,4166	9996,1681	9125,2485	10874,7514	24
37	9122,3624	9996,1512	9126,2112	10873,7888	23
38	9123,3061	9996,1343	9127,1717	10872,8282	22
39	9124,2476	9996,1173	9128,1303	10871,8696	21
40	9125,1871	9996,1003	9129,0868	10870,9131	20
41	9126,1246	9996,0833	9130,0412	10869,9587	19
42	9127,0600	9996,0663	9130,9937	10869,0062	18
43	9127,9933	9996,0492	9131,9441	10868,0558	17
44	9128,9246	9996,0320	9132,8926	10867,1073	16
45	9129,8539	9996,0148	9133,8390	10866,1609	15
46	9130,7812	9995,9976	9134,7835	10865,2164	14
47	9131,7064	9995,9804	9135,7260	10864,2739	13
48	9132,6296	9995,9631	9136,6665	10863,3334	12
49	9133,5509	9995,9458	9137,6051	10862,3948	11
50	9134,4702	9995,9284	9138,5417	10861,4582	10
51	9135,3874	9995,9110	9139,4764	10860,5235	9
52	9136,3027	9995,8936	9140,4091	10859,5908	8
53	9137,2161	9995,8761	9141,3399	10858,6600	7
54	9138,1275	9995,8586	9142,2688	10857,7311	6
55	9139,0369	9995,8410	9143,1959	10856,8040	5
56	9139,9445	9995,8235	9144,1210	10855,8790	4
57	9140,8500	9995,8058	9145,0441	10854,9558	3
58	9141,7537	9995,7882	9145,9654	10854,0345	2
59	9142,6554	9995,7705	9146,8849	10853,1150	1
60	9143,5553	9995,7527	9147,8025	10852,1974	0
M	.10 Sin. 7.	Sin. 82.	.18 Tan. 7.	Tan. 82.	M

M	Sin. 8.		Tan. 8.		
0	9143,5553	9995,75270	9147,8025	10852,1974	60
1	9144,4532	9995,7350	9148,7182	10851,2817	59
2	9145,3493	9995,7172	9149,6321	10850,3679	58
3	9146,2434	9995,6993	9150,5441	10849,4558	57
4	9147,1358	9995,6814	9151,4543	10848,5456	56
5	9148,0252	9995,6635	9152,3627	10847,6373	55
6	9148,9148	9995,6455	9153,2692	10846,7307	54
7	9149,8015	9995,6275	9154,1739	10845,8260	53
8	9150,6863	9995,6095	9155,0768	10844,9231	52
9	9151,5694	9995,5914	9155,9779	10844,0220	51
10	9152,4506	9995,5733	9156,8773	10843,1227	50
11	9153,3300	9995,5552	9157,7748	10842,2251	49
12	9154,2076	9995,5370	9158,6706	10841,3293	48
13	9155,0834	9995,5188	9159,5646	10840,4353	47
14	9155,9574	9995,5005	9160,4568	10839,5431	46
15	9156,8295	9995,4822	9161,3473	10838,6526	45
16	9157,6999	9995,4639	9162,2361	10837,7639	44
17	9158,5686	9995,4455	9163,1230	10836,8769	43
18	9159,4354	9995,4271	9164,0083	10835,9916	42
19	9160,3005	9995,4086	9164,8918	10835,1081	41
20	9161,1638	9995,3901	9165,7732	10834,2263	40
21	9162,0254	9995,3716	9166,6537	10833,3462	39
22	9162,8852	9995,3531	9167,5321	10832,4678	38
23	9163,7439	9995,3345	9168,4088	10831,5911	37
24	9164,5997	9995,3158	9169,2839	10830,7161	36
25	9165,4544	9995,2972	9170,1572	10829,8427	35
26	9166,3073	9995,2784	9171,0288	10828,9711	34
27	9167,1585	9995,2597	9171,8988	10828,1011	33
28	9168,0081	9995,2409	9172,7671	10827,2328	32
29	9168,8559	9995,2221	9173,6338	10826,3661	31
30	9169,7020	9995,2032	9174,4988	10825,5011	30
	Sin. 81.		Tan. 81.		M

M	Sin. 8.		Tan. 8.		
30	9169,7929	9995,2032	9174,4988	10325,5011	30
31	9170,5465	9995,1843	9175,3623	10824,6377	29
32	9171,3893	9995,1654	9176,2239	10823,7760	28
33	9172,2304	9995,1464	9177,0840	10822,9159	27
34	9173,0699	9995,1274	9177,9424	10822,0575	26
35	9173,9077	9995,1084	9178,7993	10821,2006	25
36	9174,7438	9995,0893	9179,6545	10820,3454	24
37	9175,5783	9995,0702	9180,5081	10819,4918	23
38	9176,4112	9995,0510	9181,3602	10818,6398	22
39	9177,2424	9995,0318	9182,2106	10817,7893	21
40	9178,0721	9995,0125	9183,0595	10816,9404	20
41	9178,9000	9994,9933	9183,9068	10816,0932	19
42	9179,7264	9994,9739	9184,7524	10815,2475	18
43	9180,5512	9994,9546	9185,5965	10814,4034	17
44	9181,3744	9994,9352	9186,4391	10813,5608	16
45	9182,1959	9994,9158	9187,2801	10812,7198	15
46	9183,0160	9994,8963	9188,1196	10811,8803	14
47	9183,8344	9994,8768	9188,9575	10811,0424	13
48	9184,6512	9994,8573	9189,7939	10810,2061	12
49	9185,4664	9994,8377	9190,6287	10809,3712	11
50	9186,2801	9994,8181	9191,4620	10808,5379	10
51	9187,0923	9994,7984	9192,2938	10807,7061	9
52	9187,9029	9994,7787	9193,1241	10806,8758	8
53	9188,7119	9994,7590	9193,9529	10806,0470	7
54	9189,5194	9994,7393	9194,7801	10805,2198	6
55	9190,3254	9994,7195	9195,6059	10804,3940	5
56	9191,1398	9994,6996	9196,4302	10803,5697	4
57	9191,9327	9994,6797	9197,2530	10802,7470	3
58	9192,7341	9994,6598	9198,0743	10801,9256	2
59	9193,5340	9994,6399	9198,8941	10801,1058	1
60	9194,3324	9994,6199	9199,7125	10800,2874	0
	Sin. 81.		Tan. 81.		M



M	Sin. 9.		Tan. 9.		
0	9194,3324	9994,6199	9199,7125	10800,2874	60
1	9195,1293	9994,5998	9200,5294	10799,4705	59
2	9195,9246	9994,5798	9201,3448	10798,6551	58
3	9196,7185	9994,5597	9202,1588	10797,8411	57
4	9197,5109	9994,5396	9202,9713	10797,0286	56
5	9198,3019	9994,5194	9203,7825	10796,2175	55
6	9199,0913	9994,4992	9204,5921	10795,4078	54
7	9199,8793	9994,4789	9205,4004	10794,5996	53
8	9200,6658	9994,4586	9206,2072	10793,7928	52
9	9201,4509	9994,4383	9207,0125	10792,9874	51
10	9202,2345	9994,4179	9207,8165	10792,1834	50
11	9203,0166	9994,3975	9208,6191	10791,3809	49
12	9203,7973	9994,3771	9209,4202	10790,5797	48
13	9204,5766	9994,3566	9210,2200	10789,7799	47
14	9205,3544	9994,3361	9211,0183	10788,9816	46
15	9206,1309	9994,3155	9211,8153	10788,1846	45
16	9206,9058	9994,2949	9212,6109	10787,3890	44
17	9207,6794	9994,2743	9213,4051	10786,5948	43
18	9208,4516	9994,2536	9214,1979	10785,8020	42
19	9209,2224	9994,2329	9214,9894	10785,0105	41
20	9209,9917	9994,2121	9215,7795	10784,2204	40
21	9210,7597	9994,1914	9216,5682	10783,4317	39
22	9211,5262	9994,1706	9217,3556	10782,6443	38
23	9212,2914	9994,1497	9218,1416	10781,8583	37
24	9213,0552	9994,1288	9218,9263	10781,0736	36
25	9213,8176	9994,1079	9219,7097	10780,2902	35
26	9214,5787	9994,0869	9220,4917	10779,5082	34
27	9215,3383	9994,0659	9221,2724	10778,7275	33
28	9216,0966	9994,0449	9222,0518	10777,9482	32
29	9216,8536	9994,0238	9222,8298	10777,1701	31
30	9217,6092	9994,0027	9223,6065	10776,3934	30
	Sin. 80.		Tan. 80.		M



M	Sin. 9.		Tan. 9.		
30	9217,6092	9994,0027	9223,6065	10776,3934	30
31	9218,3634	9993,9815	9224,3819	10775,6180	29
32	9219,1163	9993,9603	9225,1560	10774,8439	28
33	9219,8679	9993,9391	9225,9288	10774,0711	27
34	9220,6182	9993,9178	9226,7003	10773,2996	26
35	9221,3671	9993,8965	9227,4705	10772,5294	25
36	9222,1146	9993,8751	9228,2395	10771,7605	24
37	9222,8509	9993,8537	9229,0071	10770,9928	23
38	9223,6058	9993,8323	9229,7735	10770,2265	22
39	9224,3494	9993,8109	9230,5386	10769,4614	21
40	9225,0918	9993,7893	9231,3024	10768,6975	20
41	9225,8328	9993,7678	9232,0649	10767,9350	19
42	9226,5725	9993,7462	9232,8262	10767,1737	18
43	9227,3109	9993,7246	9233,5862	10766,4137	17
44	9228,0480	9993,7030	9234,3450	10765,6549	16
45	9228,7839	9993,6813	9235,1026	10764,8974	15
46	9229,5184	9993,6595	9235,8588	10764,1411	14
47	9230,2517	9993,6378	9236,6139	10763,3860	13
48	9230,9838	9993,6160	9237,3677	10762,6322	12
49	9231,7145	9993,5942	9238,1203	10761,8796	11
50	9232,4440	9993,5723	9238,8717	10761,1283	10
51	9233,1722	9993,5504	9239,6218	10760,3781	9
52	9233,8992	9993,5284	9240,3707	10759,6292	8
53	9234,6249	9993,5054	9241,1184	10758,8815	7
54	9235,3494	9993,4844	9241,8649	10758,1350	6
55	9236,0725	9993,4623	9242,6102	10757,3897	5
56	9236,7946	9993,4402	9243,3543	10756,6456	4
57	9237,5153	9993,4181	9244,0972	10755,9027	3
58	9238,8348	9993,3959	9244,8389	10755,1610	2
59	9238,9531	9993,3737	9245,5794	10754,4205	1
60	9239,6702	9993,3514	9246,3187	10753,6812	0
		Sin. 80.		Tan. 80.	M.

M	Sin. 10.		Tan. 10.		
0	9239,6702	9993,3514	9246,3187	10753,6812	60
1	9240,3861	9993,3291	9247,0569	10752,9430	59
2	9241,1007	9993,3068	9247,7939	10752,2061	58
3	9241,8141	9993,2844	9248,5296	10751,4703	57
4	9242,5263	9993,2620	9249,2643	10750,7356	56
5	9243,2373	9993,2396	9249,9977	10750,0022	55
6	9243,9472	9993,2171	9250,7300	10749,2699	54
7	9244,6558	9993,1946	9251,4612	10748,5387	53
8	9245,3632	9993,1720	9252,1912	10747,8087	52
9	9246,0695	9993,1494	9252,9200	10747,0799	51
10	9246,7745	9993,1268	9253,6477	10746,3522	50
11	9247,4784	9993,1041	9254,3743	10745,6257	49
12	9248,1811	9993,0814	9255,0997	10744,9002	48
13	9248,8826	9993,0586	9255,8240	10744,1759	47
14	9249,5836	9993,0358	9256,5471	10743,4528	46
15	9250,2822	9993,0130	9257,2691	10742,7308	45
16	9250,9802	9992,9902	9257,9900	10742,0099	44
17	9251,6771	9992,9673	9258,7098	10741,2901	43
18	9252,3729	9992,9443	9259,4285	10740,5714	42
19	9253,0674	9992,9213	9260,1461	10739,8538	41
20	9253,7609	9992,8983	9260,8625	10739,1374	40
21	9254,4532	9992,8753	9261,5779	10738,4221	39
22	9255,1443	9992,8522	9262,2921	10737,7078	38
23	9255,8343	9992,8290	9263,0053	10736,9947	37
24	9256,5232	9992,8059	9263,7173	10736,2826	36
25	9257,2110	9992,7827	9264,4283	10735,5716	35
26	9257,8976	9992,7594	9265,1382	10734,8618	34
27	9258,5831	9992,7362	9265,8469	10734,1530	33
28	9259,2675	9992,7128	9266,5547	10733,4452	32
29	9259,9508	9992,6895	9267,2613	10732,7386	31
30	9260,6330	9992,6661	9267,9669	10732,0330	30
		Sin. 79.		Tan. 79.	M

M	Sin. 10.		Tan. 10.		
30	9260,6330	9992,6661	9267,9669	10732,0330	30
31	9261,3141	9992,6427	9268,6714	10731,3285	29
32	9261,9940	9992,6192	9269,3748	10730,6251	28
33	9262,6729	9992,5957	9270,0772	10729,9227	27
34	9263,3507	9992,5721	9270,7785	10729,2214	26
35	9264,0274	9992,5485	9271,4788	10728,5211	25
36	9264,7029	9992,5249	9272,1780	10727,8219	24
37	9265,3775	9992,5013	9272,8762	10727,1238	23
38	9266,0509	9992,4776	9273,5733	10726,4266	22
39	9266,7232	9992,4538	9274,2694	10725,7306	21
40	9267,3945	9992,4300	9274,9644	10725,0355	20
41	9268,0646	9992,4062	9275,6584	10724,3415	19
42	9268,7338	9992,3824	9276,3514	10723,6485	18
43	9269,4019	9992,3585	9277,0433	10722,9566	17
44	9270,0689	9992,3346	9277,7343	10722,2657	16
45	9270,7348	9992,3106	9278,4241	10721,5758	15
46	9271,3996	9992,2866	9279,1130	10720,8869	14
47	9272,0634	9992,2625	9279,8009	10720,1991	13
48	9272,7262	9992,2385	9280,4877	10719,5122	12
49	9273,3880	9992,2143	9281,1736	10718,8263	11
50	9274,0487	9992,1902	9281,8584	10718,1415	10
51	9274,7083	9992,1660	9282,5423	10717,4577	9
52	9275,3669	9992,1418	9283,2251	10716,7748	8
53	9276,0245	9992,1175	9283,9070	10716,0930	7
54	9276,6810	9992,0932	9284,5878	10715,4121	6
55	9277,3365	9992,0688	9285,2677	10714,7322	5
56	9277,9910	9992,0445	9285,9465	10714,0534	4
57	9278,6445	9992,0200	9286,6244	10713,3755	3
58	9279,2969	9991,9956	9287,3013	10712,6986	2
59	9279,9484	9991,9711	9287,9773	10712,0227	1
60	9280,5988	9991,9465	9288,6522	10711,3477	0
		Sin. 79.		Tan. 79.	M

M	Sin. II.		Tan. II.	
0	9280,5988	9991,9465	9288,6522	10711,3477 60
1	9281,2482	9991,9220	9289,3262	10710,6737 59
2	9281,8966	9991,8973	9289,9992	10710,0007 58
3	9282,5440	9991,8727	9290,6713	10709,3286 57
4	9283,1904	9991,8480	9291,3424	10708,6575 56
5	9283,8359	9991,8233	9292,0125	10707,9874 55
6	9284,4803	9991,7985	9292,6817	10707,3182 54
7	9285,1237	9991,7737	9293,3499	10706,6500 53
8	9285,7661	9991,7489	9294,0172	10705,9827 52
9	9286,4075	9991,7240	9294,6835	10705,3164 51
10	9287,0480	9991,6991	9295,3489	10704,6510 50
11	9287,6875	9991,6741	9296,0134	10703,9866 49
12	9288,3260	9991,6491	9296,6768	10703,3231 48
13	9288,9635	9991,6241	9297,3394	10702,6605 47
14	9289,6001	9991,5990	9298,0010	10701,9989 46
15	9290,2357	9991,5739	9298,6617	10701,3382 45
16	9290,8703	9991,5487	9299,3215	10700,6784 44
17	9291,5040	9991,5236	9299,9804	10700,0195 43
18	9292,1367	9991,4983	9300,6383	10699,3616 42
19	9292,7684	9991,4731	9301,2953	10698,7046 41
20	9293,3992	9991,4478	9301,9514	10698,0485 40
21	9294,0291	9991,4224	9302,6066	10697,3933 39
22	9294,6580	9991,3971	9303,2609	10696,7390 38
23	9295,2859	9991,3716	9303,9142	10696,0857 37
24	9295,9129	9991,3462	9304,5667	10695,4332 36
25	9296,5390	9991,3207	9305,2182	10694,7817 35
26	9297,1641	9991,2952	9305,8689	10694,1310 34
27	9297,7883	9991,2696	9306,5186	10693,4813 33
28	9298,4116	9991,2440	9307,1675	10692,8324 32
29	9299,0339	9991,2183	9307,8155	10692,1844 31
30	9299,6553	9991,1927	9308,4626	10691,5374 30
	Sin. 78.		Tan. 78.	
				M



M	Sin. II.		Tan. II.		
30	9299,6553	9991,1927	9308,4625	10691,5374	30
31	9300,2757	9991,1669	9309,1088	10690,8512	29
32	9300,8953	9991,1412	9309,7541	10690,2459	28
33	9301,5139	9991,1154	9310,3985	10689,6014	27
34	9302,1317	9991,0895	9311,0421	10688,9578	26
35	9302,7485	9991,0637	9311,6847	10688,3152	25
36	9303,3643	9991,0378	9312,3265	10687,6734	24
37	9303,9793	9991,0118	9312,9675	10687,0324	23
38	9304,5934	9990,9858	9313,6076	10686,3924	22
39	9305,2066	9990,9598	9314,2468	10685,7532	21
40	9305,8189	9990,9337	9314,8851	10685,1148	20
41	9306,4302	9990,9076	9315,5226	10684,4774	19
42	9307,0407	9990,8815	9316,1592	10683,8407	18
43	9307,6503	9990,8553	9316,7950	10683,2050	17
44	9308,2590	9990,8291	9317,4299	10682,5701	16
45	9308,8668	9990,8028	9318,0639	10681,9360	15
46	9309,4737	9990,7765	9318,6971	10681,3028	14
47	9310,0797	9990,7502	9319,3295	10680,6704	13
48	9310,6849	9990,7238	9319,9610	10680,0389	12
49	9311,2892	9990,6974	9320,5917	10679,4082	11
50	9311,8926	9990,6710	9321,2216	10678,7784	10
51	9312,4951	9990,6445	9321,8506	10678,1493	9
52	9313,0967	9990,6179	9322,4788	10677,5212	8
53	9313,6975	9990,5914	9323,1061	10676,8938	7
54	9314,2974	9990,5648	9323,7326	10676,2673	6
55	9314,8965	9990,5381	9324,3583	10675,6416	5
56	9315,4947	9990,5115	9324,9832	10675,0167	4
57	9316,0920	9990,4847	9325,6072	10674,3927	3
58	9316,6885	9990,4580	9326,2305	10673,7694	2
59	9317,2841	9990,4312	9326,8529	10673,1470	1
60	9317,8789	9990,4044	9327,4745	10672,5254	0
		Sin. 78.		Tan. 78.	M

M	Sin. 12.		Tan. 12.	
0	9317,8709	9990,4044	9327,4745	10672,5254 60
1	9318,4728	9990,3775	9328,0953	10671,9046 59
2	9319,0659	9990,3506	9328,7153	10671,2847 58
3	9319,6581	9990,3236	9329,3344	10670,6655 57
4	9320,2495	9990,2966	9329,9528	10670,0471 56
5	9320,8400	9990,2696	9330,5704	10669,4296 55
6	9321,4297	9990,2425	9331,1871	10668,8128 54
7	9322,0186	9990,2154	9331,8031	10668,1968 53
8	9322,6066	9990,1883	9332,4183	10667,5817 52
9	9323,1938	9990,1611	9333,0326	10666,9673 51
10	9323,7802	9990,1339	9333,6462	10666,3537 50
11	9324,3657	9990,1066	9334,2590	10665,7409 49
12	9324,9504	9990,0794	9334,8710	10665,1289 48
13	9325,5343	9990,0520	9335,4823	10664,5177 47
14	9326,1174	9990,0247	9336,0927	10663,9072 46
15	9326,6996	9989,9972	9336,7024	10663,2976 45
16	9327,2811	9989,9698	9337,3112	10662,6887 44
17	9327,8617	9989,9423	9337,9194	10662,0806 43
18	9328,4415	9989,9148	9338,5267	10661,4732 42
19	9329,0205	9989,8872	9339,1333	10660,8666 41
20	9329,5987	9989,8596	9339,7391	10660,2608 40
21	9330,1761	9989,8320	9340,3441	10659,6558 39
22	9330,7527	9989,8043	9340,9483	10659,0516 38
23	9331,3285	9989,7766	9341,5518	10658,4481 37
24	9331,9035	9989,7488	9342,1546	10657,8453 36
25	9332,4777	9989,7210	9342,7566	10657,2433 35
26	9333,0511	9989,6932	9343,3578	10656,6421 34
27	9333,6236	9989,6653	9343,9583	10656,0416 33
28	9334,1955	9989,6374	9344,5580	10655,4419 32
29	9334,7665	9989,6095	9345,1570	10654,8429 31
30	9335,3367	9989,5815	9345,7552	10654,2447 30
	Sin. 77.		Tan. 77. M	

M	Sin. 12.		Tan. 12.		
30	9335,3367	9989,5815	9345,7552	10634,2447	30
31	9335,9062	9989,5534	9346,3527	10653,6472	29
32	9336,4748	9989,5254	9346,9494	10653,0505	28
33	9337,0427	9989,4973	9347,5454	10652,4545	27
34	9337,6098	9989,4691	9348,1407	10651,8593	26
35	9338,1762	9989,4410	9348,7352	10651,2647	25
36	9338,7417	9989,4127	9349,3290	10650,6710	24
37	9339,3065	9989,3845	9349,9220	10650,0779	23
38	9339,8705	9989,3562	9350,5143	10649,4856	22
39	9340,4338	9989,3278	9351,1059	10648,8940	21
40	9340,9963	9989,2995	9351,6968	10648,3032	20
41	9341,5580	9989,2711	9352,2869	10647,7130	19
42	9342,1189	9989,2426	9352,8763	10647,1236	18
43	9342,6791	9989,2141	9353,4650	10646,5349	17
44	9343,2386	9989,1856	9354,0529	10645,9470	16
45	9343,7972	9989,1570	9354,6402	10645,3597	15
46	9344,3552	9989,1284	9355,2267	10644,7732	14
47	9344,9123	9989,0998	9355,8125	10644,1874	13
48	9345,4688	9989,0711	9356,3976	10643,6023	12
49	9346,0244	9989,0424	9356,9820	10643,0179	11
50	9346,5794	9989,0136	9357,5657	10642,4342	10
51	9347,1336	9988,9848	9358,1487	10641,8512	9
52	9347,6870	9988,9560	9358,7310	10641,2689	8
53	9348,2397	9988,9271	9359,3126	10640,6874	7
54	9348,7917	9988,8982	9359,8934	10640,1065	6
55	9349,3429	9988,8692	9360,4736	10639,5263	5
56	9349,8934	9988,8402	9361,0531	10638,9468	4
57	9350,4431	9988,8112	9361,6319	10638,3681	3
58	9350,9921	9988,7821	9362,2100	10637,7900	2
59	9351,5404	9988,7530	9362,7874	10637,2126	1
60	9352,0880	9988,7239	9363,3641	10636,6358	0
		Sin. 77.		Tan. 77.	M

M	Sin. 13.		Tan. 13.		
0	9352,0880	9988,7239	9363,3641	10636,6359	60
1	9352,6348	9988,6947	9363,9401	10636,0598	59
2	9353,1809	9988,6655	9364,5154	10635,4845	58
3	9353,7263	9988,6362	9365,0901	10634,9098	57
4	9354,2710	9988,6069	9365,6640	10634,3359	56
5	9354,8150	9988,5776	9366,2373	10633,7626	55
6	9355,3582	9988,5482	9366,8099	10633,1900	54
7	9355,9007	9988,5188	9367,3819	10632,6180	53
8	9356,4425	9988,4893	9367,9532	10632,0468	52
9	9356,9836	9988,4598	9368,5237	10631,4762	51
10	9357,5240	9988,4303	9369,0937	10630,9063	50
11	9358,0637	9988,4007	9369,6629	10630,3370	49
12	9358,6026	9988,3711	9370,2315	10629,7684	48
13	9359,1409	9988,3415	9370,7994	10629,2005	47
14	9359,6785	9988,3118	9371,3666	10628,6333	46
15	9360,2153	9988,2820	9371,9332	10628,0667	45
16	9360,7515	9988,2523	9372,4992	10627,5008	44
17	9361,2869	9988,2225	9373,0644	10626,9355	43
18	9361,8217	9988,1926	9373,6290	10626,3709	42
19	9362,3558	9988,1627	9374,1930	10625,8069	41
20	9362,8892	9988,1328	9374,7563	10625,2436	40
21	9363,4218	9988,1029	9375,3189	10624,6810	39
22	9363,9538	9988,0729	9375,8809	10624,1190	38
23	9364,4852	9988,0428	9376,4423	10623,5576	37
24	9365,0158	9988,0128	9377,0030	10622,9969	36
25	9365,5457	9987,9826	9377,5631	10622,4369	35
26	9366,0750	9987,9525	9378,1225	10621,8775	34
27	9366,6036	9987,9223	9378,6812	10621,3187	33
28	9367,1315	9987,8921	9379,2394	10620,7605	32
29	9367,6587	9987,8618	9379,7969	10620,2031	31
30	9368,1852	9987,8315	9380,3537	10619,6462	30
	Sin. 76.			Tan. 76.	M



M	Sin. 13.		Tan. 13.	
30	9368,1852	9987,8315	9380,3537	10519,5462
31	9368,7111	9987,8011	9380,9099	10619,0900
32	9369,2363	9987,7707	9381,4655	10618,5344
33	9369,7508	9987,7403	9382,0205	10617,9795
34	9370,2847	9987,7098	9382,5748	10617,4251
35	9370,8079	9987,6793	9383,1285	10616,8714
36	9371,3304	9987,6488	9383,6815	10616,3184
37	9371,8522	9987,6182	9384,2340	10615,7659
38	9372,3734	9987,5876	9384,7858	10615,2141
39	9372,8940	9987,5569	9385,3370	10614,6629
40	9373,4138	9987,5262	9385,8876	10614,1124
41	9373,9331	9987,4955	9386,4375	10613,5624
42	9374,4516	9987,4647	9386,9869	10613,0131
43	9374,9695	9987,4339	9387,5356	10612,4643
44	9375,4868	9987,4031	9388,0837	10611,9162
45	9376,0034	9987,3722	9388,6312	10611,3687
46	9376,5193	9987,3412	9389,1781	10610,8219
47	9377,0346	9987,3103	9389,7243	10610,2756
48	9377,5493	9987,2792	9390,2700	10609,7299
49	9378,0633	9987,2482	9390,8150	10609,1849
50	9378,5766	9987,2171	9391,3595	10608,6404
51	9379,0893	9987,1860	9391,9033	10608,0966
52	9379,6014	9987,1548	9392,4466	10607,5533
53	9380,1129	9987,1236	9392,9892	10607,0107
54	9380,6237	9987,0924	9393,5313	10606,4687
55	9381,1338	9987,0611	9394,0727	10605,9272
56	9381,6434	9987,0298	9394,6136	10605,3863
57	9382,1522	9986,9984	9395,1538	10604,8461
58	9382,6605	9986,9670	9395,6935	10604,3064
59	9383,1681	9986,9356	9396,2325	10603,7674
60	9383,6751	9986,9041	9396,7710	10603,2289
		Sin. 76.		Tan. 76.
				M

M	Sin. 14.		Tan. 14.		
0	9383,6751	9986,9041	9396,7710	10603,2289	60
1	9384,1815	9986,8726	9397,3089	10602,6910	59
2	9384,6873	9986,8410	9397,8462	10602,1537	58
3	9385,1924	9986,8094	9398,3829	10601,6170	57
4	9385,6969	9986,7778	9398,9191	10601,0808	56
5	9386,2008	9986,7461	9399,4546	10600,5453	55
6	9386,7040	9986,7144	9399,9896	10600,0103	54
7	9387,2066	9986,6826	9400,5240	10599,4760	53
8	9387,7087	9986,6508	9401,0578	10598,9421	52
9	9388,2101	9986,6190	9401,5910	10598,4089	51
10	9388,7108	9986,5872	9402,1237	10597,8763	50
11	9389,2110	9986,5552	9402,6557	10597,3442	49
12	9389,7106	9986,5233	9403,1873	10596,8127	48
13	9390,2095	9986,4913	9403,7182	10596,2817	47
14	9390,7079	9986,4593	9404,2486	10595,7514	46
15	9391,2056	9986,4272	9404,7784	10595,2216	45
16	9391,7027	9986,3951	9405,3076	10594,6923	44
17	9392,1993	9986,3630	9405,8363	10594,1637	43
18	9392,6952	9986,3308	9406,3644	10593,6356	42
19	9393,1905	9986,2986	9406,8919	10593,1080	41
20	9393,6852	9986,2663	9407,4189	10592,5810	40
21	9394,1793	9986,2340	9407,9453	10592,0546	39
22	9394,6728	9986,2017	9408,4711	10591,5288	38
23	9395,1658	9986,1693	9408,9964	10591,0035	37
24	9395,6581	9986,1369	9409,5212	10590,4787	36
25	9396,1498	9986,1044	9410,0454	10589,9545	35
26	9396,6410	9986,0719	9410,5690	10589,4309	34
27	9397,1315	9986,0394	9411,0921	10588,9078	33
28	9397,6215	9986,0068	9411,6146	10588,3853	32
29	9398,1108	9985,9742	9412,1366	10587,8633	31
30	9398,5996	9985,9416	9412,6580	10587,3419	30
	Sin. 75.			Tan. 75.	M

M	Sin. 14.		Tan. 14.		
30	9398,5996	9985,9416	9412,6580	10587,3419	30
31	9399,0878	9985,9089	9413,1789	10586,8210	29
32	9399,5764	9985,8761	9413,6992	10586,3007	28
33	9400,0624	9985,8434	9414,2190	10585,7809	27
34	9400,5489	9985,8106	9414,7383	10585,2616	26
35	9401,0341	9985,7777	9415,2570	10584,7429	25
36	9401,5200	9985,7448	9415,7752	10584,2248	24
37	9402,0047	9985,7119	9416,2928	10583,7071	23
38	9402,4889	9985,6789	9416,8099	10583,1900	22
39	9402,9724	9985,6459	9417,3264	10582,6735	21
40	9403,4554	9985,6129	9417,8425	10582,1575	20
41	9403,9378	9985,5798	9418,3579	10581,6420	19
42	9404,4196	9985,5467	9418,8729	10581,1270	18
43	9404,9009	9985,5135	9419,3873	10580,6126	17
44	9405,3816	9985,4803	9419,9012	10580,0987	16
45	9405,8617	9985,4471	9420,4146	10579,5853	15
46	9406,3412	9985,4138	9420,9274	10579,0725	14
47	9406,8202	9985,3805	9421,4397	10578,5602	13
48	9407,2987	9985,3471	9421,9515	10578,0484	12
49	9407,7765	9985,3137	9422,4628	10577,5372	11
50	9408,2538	9985,2803	9422,9735	10577,0264	10
51	9408,7306	9985,2468	9423,4837	10576,5162	9
52	9409,2067	9985,2133	9423,9934	10576,0065	8
53	9409,6824	9985,1797	9424,5026	10575,4973	7
54	9410,1574	9985,1461	9425,0113	10574,9887	6
55	9410,6319	9985,1125	9425,5194	10574,4805	5
56	9411,1059	9985,0788	9426,0270	10573,9729	4
57	9411,5793	9985,0451	9426,5341	10573,4658	3
58	9412,0521	9985,0114	9427,0408	10572,9592	2
59	9412,5244	9984,9776	9427,5468	10572,4531	1
60	9412,9962	9984,9437	9428,0524	10571,9475	0
		Sin. 75.		Tan. 75.	M

M	Sin. 15.		Tan. 15.		
0	9412,9962	9984,9437	9428,0524	10571,9475	60
1	9413,4674	9984,9099	9428,5575	10571,4424	59
2	9413,9380	9984,8760	9429,0620	10570,9379	58
3	9414,4082	9984,8420	9429,5661	10570,4338	57
4	9414,8777	9984,8080	9430,0697	10569,9303	56
5	9415,3467	9984,7740	9430,5727	10569,4272	55
6	9415,8152	9984,7399	9431,0752	10568,9247	54
7	9416,2831	9984,7058	9431,5773	10568,4226	53
8	9416,7505	9984,6717	9432,0788	10567,9211	52
9	9417,2174	9984,6375	9432,5799	10567,4201	51
10	9417,6837	9984,6033	9433,0804	10566,9195	50
11	9418,1495	9984,5690	9433,5805	10566,4195	49
12	9418,6147	9984,5347	9434,0800	10565,9199	48
13	9419,0794	9984,5003	9434,5791	10565,4209	47
14	9419,5436	9984,4660	9435,0776	10564,9223	46
15	9420,0073	9984,4315	9435,5757	10564,4242	45
16	9420,4704	9984,3971	9436,0732	10563,9267	44
17	9420,9329	9984,3626	9436,5703	10563,4296	43
18	9421,3950	9984,3280	9437,0669	10562,9330	42
19	9421,8565	9984,2935	9437,5630	10562,4369	41
20	9422,3175	9984,2588	9438,0586	10561,9413	40
21	9422,7780	9984,2242	9438,5538	10561,4461	39
22	9423,2380	9984,1895	9439,0484	10560,9515	38
23	9423,6974	9984,1548	9439,5426	10560,4573	37
24	9424,1563	9984,1200	9440,0363	10559,9637	36
25	9424,6147	9984,0852	9440,5295	10559,4705	35
26	9425,0725	9984,0503	9441,0222	10558,9777	34
27	9425,5299	9984,0154	9441,5144	10558,4855	33
28	9425,9867	9983,9805	9442,0062	10557,9937	32
29	9426,4430	9983,9455	9442,4975	10557,5024	31
30	9426,8988	9983,9105	9442,9883	10557,0116	30
	Sin. 74.			Tan. 74.	M



M	Sin. 15.		Tan. 15.		M
30	9426,8988	9983,9105	9442,9883	10557,0116	30
31	9427,3541	9983,8754	9443,4786	10556,5213	29
32	9427,8088	9983,8403	9443,9685	10556,0314	28
33	9428,2631	9983,8052	9444,4579	10555,5421	27
34	9428,7168	9983,7700	9444,9468	10555,0531	26
35	9429,1701	9983,7348	9445,4352	10554,5647	25
36	9429,6228	9983,6996	9445,9232	10554,0767	24
37	9430,0750	9983,6643	9446,4107	10553,5892	23
38	9430,5267	9983,6289	9446,8977	10553,1022	22
39	9430,9779	9983,5936	9447,3843	10552,6156	21
40	9431,4286	9983,5581	9447,8704	10552,1295	20
41	9431,8788	9983,5227	9448,3561	10551,6439	19
42	9432,3285	9983,4872	9448,8412	10551,1587	18
43	9432,7777	9983,4517	9449,3259	10550,6740	17
44	9433,2263	9983,4161	9449,8102	10550,1897	16
45	9433,6745	9983,3805	9450,2940	10549,7059	15
46	9434,1222	9983,3449	9450,7773	10549,2226	14
47	9434,5694	9983,3092	9451,2602	10548,7397	13
48	9435,0168	9983,2734	9451,7426	10548,2573	12
49	9435,4623	9983,2377	9452,2246	10547,7753	11
50	9435,9080	9983,2019	9452,7061	10547,2938	10
51	9436,3532	9983,1660	9453,1872	10546,8128	9
52	9436,7979	9983,1301	9453,6677	10546,3322	8
53	9437,2421	9983,0942	9454,1479	10545,8520	7
54	9437,6859	9983,0582	9454,6276	10545,3723	6
55	9438,1291	9983,0222	9455,1069	10544,8930	5
56	9438,5719	9982,9862	9455,5857	10544,4142	4
57	9439,0141	9982,9501	9456,0640	10543,9359	3
58	9439,4559	9982,9140	9456,5419	10543,4580	2
59	9439,8972	9982,8778	9457,0194	10542,9805	1
60	9440,3380	9982,8416	9457,4964	10542,5035	0
		Sin. 74.		Tan. 74.	M

M	Sin. 16.		Tan. 16.		
00	9440,3380	9982,8416	9457,4964	10542,5035	60
1	9440,7784	9982,8053	9457,9730	10542,0269	59
2	9441,2182	9982,7691	9458,4491	10541,5508	58
3	9441,6576	9982,7327	9458,9248	10541,0751	57
4	9442,0964	9982,6964	9459,4000	10540,5999	56
5	9442,5348	9982,6600	9459,8748	10540,1251	55
6	9442,9728	9982,6235	9460,3492	10539,6507	54
7	9443,4102	9982,5870	9460,8231	10539,1768	53
8	9443,8472	9982,5505	9461,2966	10538,7033	52
9	9444,2837	9982,5140	9461,7697	10538,2302	51
10	9444,7197	9982,4774	9462,2423	10537,7576	50
11	9445,1552	9982,4407	9462,7145	10537,2854	49
12	9445,5903	9982,4040	9463,1862	10536,8137	48
13	9446,0249	9982,3673	9463,6576	10536,3423	47
14	9446,4590	9982,3305	9464,1285	10535,8715	46
15	9446,8927	9982,2937	9464,5989	10535,4010	45
16	9447,3259	9982,2569	9465,0690	10534,9310	44
17	9447,7586	9982,2200	9465,5386	10534,4614	43
18	9448,1909	9982,1831	9466,0077	10533,9922	42
19	9448,6226	9982,1461	9466,4765	10533,5234	41
20	9449,0540	9982,1091	9466,9448	10533,0551	40
21	9449,4848	9982,0721	9467,4127	10532,5872	39
22	9449,9152	9982,0350	9467,8802	10532,1198	38
23	9450,3451	9981,9979	9468,3472	10531,6527	37
24	9450,7746	9981,9607	9468,8138	10531,1861	36
25	9451,2036	9981,9235	9469,2801	10530,7199	35
26	9451,6322	9981,8863	9469,7459	10530,2541	34
27	9452,0603	9981,8490	9470,2112	10529,7887	33
28	9452,4879	9981,8117	9470,6762	10529,3238	32
29	9452,9150	9981,7743	9471,1407	10528,8592	31
30	9453,3418	9981,7369	9471,6048	10528,3951	30
		Sin. 73.		Tan. 73.	M

M	Sin. 16.		Tan. 16.		
30	9453,3418	9981,7369	9471,6048	10528,3951	30
31	9453,7680	9981,6995	9472,0685	10527,9314	29
32	9454,1938	9981,6620	9472,5318	10527,4681	28
33	9454,6192	9981,6245	9472,9947	10527,0053	27
34	9455,0441	9981,5869	9473,4571	10526,5428	26
35	9455,4685	9981,5493	9473,9192	10526,0807	25
36	9455,8925	9981,5117	9474,3808	10525,6191	24
37	9456,3161	9981,4740	9474,8420	10525,1579	23
38	9456,7392	9981,4363	9475,3029	10524,6971	22
39	9457,1618	9981,3985	9475,7633	10524,2367	21
40	9457,5840	9981,3607	9476,2233	10523,7767	20
41	9458,0058	9981,3229	9476,6828	10523,3171	19
42	9458,4271	9981,2850	9477,1420	10522,8579	18
43	9458,8479	9981,2471	9477,6008	10522,3991	17
44	9459,2683	9981,2091	9478,0592	10521,9407	16
45	9459,6883	9981,1711	9478,5172	10521,4827	15
46	9460,1078	9981,1331	9478,9747	10521,0252	14
47	9460,5269	9981,0950	9479,4319	10520,5680	13
48	9460,9456	9981,0569	9479,8887	10520,1112	12
49	9461,3638	9981,0187	9480,3451	10519,6549	11
50	9461,7816	9980,9805	9480,8010	10519,1989	10
51	9462,1989	9980,9423	9481,2566	10518,7433	9
52	9462,6158	9980,9040	9481,7118	10518,2881	8
53	9463,0323	9980,8657	9482,1666	10517,8334	7
54	9463,4483	9980,8273	9482,6209	10517,3790	6
55	9463,8638	9980,7889	9483,0749	10516,9250	5
56	9464,2790	9980,7504	9483,5285	10516,4714	4
57	9464,6937	9980,7120	9483,9817	10516,0182	3
58	9465,1080	9980,6734	9484,4345	10515,5654	2
59	9465,5219	9980,6349	9484,8870	10515,1130	1
60	9465,9353	9980,5963	9485,3390	10514,6609	0
		Sin. 73.		Tan. 73.	M

M	Sin. 17.		Tan. 17.		
0	9465,9353	9980,5963	9485,3390	10514,6609	60
1	9466,3483	9980,5576	9485,7906	10514,2093	59
2	9466,7609	9980,5189	9486,2419	10513,7580	58
3	9467,1730	9980,4802	9486,6927	10513,3072	57
4	9467,5847	9980,4415	9487,1432	10512,8567	56
5	9467,9960	9980,4027	9487,5933	10512,4066	55
6	9468,4069	9980,3638	9488,0430	10511,9569	54
7	9468,8173	9980,3249	9488,4923	10511,5076	53
8	9469,2273	9980,2860	9488,9412	10511,0587	52
9	9469,6369	9980,2470	9489,3898	10510,6101	51
10	9470,0460	9980,2080	9489,8380	10510,1619	50
11	9470,4548	9980,1690	9490,2858	10509,7142	49
12	9470,8631	9980,1299	9490,7332	10509,2668	48
13	9471,2710	9980,0908	9491,1802	10508,8197	47
14	9471,6785	9980,0516	9491,6268	10508,3731	46
15	9472,0856	9980,0124	9492,0731	10507,9268	45
16	9472,4922	9979,9732	9492,5190	10507,4809	44
17	9472,8984	9979,9339	9492,9645	10507,0354	43
18	9473,3042	9979,8945	9493,4097	10506,5903	42
19	9473,7096	9979,8552	9493,8544	10506,1455	41
20	9474,1146	9979,8158	9494,2988	10505,7011	40
21	9474,5192	9979,7763	9494,7428	10505,2571	39
22	9474,9233	9979,7368	9495,1865	10504,8135	38
23	9475,3271	9979,6973	9495,6297	10504,3702	37
24	9475,7304	9979,6577	9496,0726	10503,9273	36
25	9476,1333	9979,6181	9496,5152	10503,4848	35
26	9476,5358	9979,5785	9496,9573	10503,0426	34
27	9476,9379	9979,5388	9497,3991	10502,6008	33
28	9477,3396	9979,4990	9497,8405	10502,1594	32
29	9477,7409	9979,4593	9498,2816	10501,7183	31
30	9478,1418	9979,4195	9498,7223	10501,2777	30
	Sin. 72.		Tan. 72.		M



M	Sin. 17.		Tan. 17.		
30	9478,1418	9979,4195	9498,7223	10501,2777	30
31	9478,5422	9979,3796	9499,1626	10500,8373	29
32	9478,9423	9979,3397	9499,6025	10500,3974	28
33	9479,3420	9979,2998	9500,0421	10499,9578	27
34	9479,7412	9979,2598	9500,4814	10499,5186	26
35	9480,1401	9979,2198	9500,9202	10499,0797	25
36	9480,5385	9979,1797	9501,3587	10498,6412	24
37	9480,9365	9979,1396	9501,7959	10498,2030	23
38	9481,3342	9979,0995	9502,2346	10497,7653	22
39	9481,7314	9979,0593	9502,6721	10497,3279	21
40	9482,1283	9979,0191	9503,1091	10496,8908	20
41	9482,5247	9978,9789	9503,5458	10496,4541	19
42	9482,9208	9978,9386	9503,9822	10496,0177	18
43	9483,3164	9978,8982	9504,4182	10495,5818	17
44	9483,7117	9978,8579	9504,8538	10495,1461	16
45	9484,1065	9978,8174	9505,2891	10494,7109	15
46	9484,5010	9978,7770	9505,7240	10494,2759	14
47	9484,8951	9978,7365	9506,1585	10493,8414	13
48	9485,2887	9978,6959	9506,5928	10493,4072	12
49	9485,6820	9978,6553	9507,0266	10492,9733	11
50	9486,0749	9978,6147	9507,4601	10492,5398	10
51	9486,4674	9978,5741	9507,8933	10492,1066	9
52	9486,8595	9978,5333	9508,3261	10491,6738	8
53	9487,2512	9978,4926	9508,7586	10491,2414	7
54	9487,6425	9978,4518	9509,1906	10490,8093	6
55	9488,0335	9978,4110	9509,6224	10490,3775	5
56	9488,4240	9978,3701	9510,0538	10489,9461	4
57	9488,8142	9978,3292	9510,4849	10489,5150	3
58	9489,2039	9978,2883	9510,9156	10489,0843	2
59	9489,5933	9978,2473	9511,3460	10488,6539	1
60	9489,9823	9978,2063	9511,7760	10488,2239	0
	Sin. 72.			Tan. 72.	M

M	Sin. 18.		Tan. 18.	
0	9489,9823	9978,2063	9511,7760	10488,2239 60
1	9490,3709	9978,1652	9512,2057	10487,7942 59
2	9490,7592	9978,1241	9512,6350	10487,3649 58
3	9491,1470	9978,0830	9513,0640	10486,9359 57
4	9491,5345	9978,0418	9513,4927	10486,5073 56
5	9491,9216	9978,0005	9513,9210	10486,0789 55
6	9492,3083	9977,9593	9514,3490	10485,6510 54
7	9492,6946	9977,9180	9514,7766	10485,2233 53
8	9493,0805	9977,8766	9515,2039	10484,7960 52
9	9493,4661	9977,8352	9515,6308	10484,3691 51
10	9493,8513	9977,7938	9516,0575	10483,9424 50
11	9494,2361	9977,7523	9516,4838	10483,5162 49
12	9494,6205	9977,7108	9516,9097	10483,0902 48
13	9495,0046	9977,6692	9517,3353	10482,6646 47
14	9495,3882	9977,6276	9517,7606	10482,2394 46
15	9495,7715	9977,5860	9518,1855	10481,8144 45
16	9496,1544	9977,5443	9518,6101	10481,3898 44
17	9496,5370	9977,5026	9519,0344	10480,9656 43
18	9496,9192	9977,4608	9519,4583	10480,5416 42
19	9497,3010	9977,4190	9519,8819	10480,1180 41
20	9497,6824	9977,3772	9520,3052	10479,6947 40
21	9498,0635	9977,3353	9520,7281	10479,2718 39
22	9498,4442	9977,2934	9521,1507	10478,8492 38
23	9498,8245	9977,2514	9521,5730	10478,4269 37
24	9499,2044	9977,2094	9521,9950	10478,0050 36
25	9499,5840	9977,1674	9522,4166	10477,5833 35
26	9499,9632	9977,1253	9522,8379	10477,1620 34
27	9500,3421	9977,0832	9523,2589	10476,7411 33
28	9500,7205	9977,0410	9523,6795	10476,3204 32
29	9501,0987	9976,9988	9524,0998	10475,9001 31
30	9501,4764	9976,9565	9524,5198	10475,4801 30
	Sin. 71.		Tan. 71.	
				M

M	Sin. 18.		Tan. 18.		
30	9501,4764	9976,9565	9524,5198	10475,4808	30
31	9501,8538	9976,9143	9524,9395	10475,0604	29
32	9502,2308	9976,8719	9525,3588	10474,6411	28
33	9502,6075	9976,8296	9525,7779	10474,2221	27
34	9502,9837	9976,7871	9526,1966	10473,8033	26
35	9503,3597	9976,7447	9526,6150	10473,3850	25
36	9503,7352	9976,7022	9527,0330	10472,9669	24
37	9504,1104	9976,6597	9527,4508	10472,5492	23
38	9504,4853	9976,6171	9527,8682	10472,1318	22
39	9504,8598	9976,5745	9528,2853	10471,7146	21
40	9505,2339	9976,5318	9528,7021	10471,2979	20
41	9505,6077	9976,4891	9529,1185	10470,8814	19
42	9505,9811	9976,4464	9529,5347	10470,4652	18
43	9506,3541	9976,4036	9529,9505	10470,0494	17
44	9506,7268	9976,3608	9530,3660	10469,6339	16
45	9507,0992	9976,3179	9530,7812	10469,2187	15
46	9507,4711	9976,2750	9531,1961	10468,8038	14
47	9507,8428	9976,2320	9531,6107	10468,3892	13
48	9508,2140	9976,1891	9532,0249	10467,9750	12
49	9508,5850	9976,1460	9532,4389	10467,5610	11
50	9508,9555	9976,1030	9532,8525	10467,1474	10
51	9509,3257	9976,0599	9533,2658	10466,7341	9
52	9509,6956	9976,0167	9533,6789	10466,3211	8
53	9510,0651	9975,9735	9534,0916	10465,9084	7
54	9510,4343	9975,9303	9534,5039	10465,4960	6
55	9510,8031	9975,8870	9534,9160	10465,0839	5
56	9511,1715	9975,8437	9535,3278	10464,6721	4
57	9511,5396	9975,8003	9535,7393	10464,2607	3
58	9511,9074	9975,7569	9536,1504	10463,8495	2
59	9512,2748	9975,7135	9536,5613	10463,4386	1
60	9512,6419	9975,6700	9536,9718	10463,0281	0
		Sin. 71.		Tan. 71.	M

M.	Sin. 19.		Tan. 19.	
0	9512,6419	9975,6700	9536,9718	10463,0281 60
1	9513,0086	9975,6265	9537,3820	10462,6179 59
2	9513,3750	9975,5829	9537,7920	10462,2079 58
3	9513,7410	9975,5393	9538,2016	10461,7983 57
4	9514,1067	9975,4957	9538,6109	10461,3890 56
5	9514,4720	9975,4520	9539,0200	10460,9800 55
6	9514,8370	9975,4083	9539,4287	10460,5712 54
7	9515,2017	9975,3645	9539,8371	10460,1628 53
8	9515,5660	9975,3207	9540,2452	10459,7547 52
9	9515,9399	9975,2769	9540,6530	10459,3469 51
10	9516,2936	9975,2330	9541,0606	10458,9394 50
11	9516,6569	9975,1890	9541,4678	10458,5321 49
12	9517,0198	9975,1451	9541,8747	10458,1252 48
13	9517,3824	9975,1010	9542,2813	10457,7186 47
14	9517,7447	9975,0570	9542,6876	10457,3123 46
15	9518,1066	9975,0129	9543,0936	10456,9063 45
16	9518,4682	9974,9688	9543,4994	10456,5006 44
17	9518,8294	9974,9246	9543,9048	10456,0951 43
18	9519,1903	9974,8804	9544,3099	10455,6900 42
19	9519,5509	9974,8361	9544,7148	10455,2851 41
20	9519,9112	9974,7918	9545,1193	10454,8806 40
21	9520,2711	9974,7475	9545,5236	10454,4764 39
22	9520,6306	9974,7031	9545,9275	10454,0724 38
23	9520,9899	9974,6587	9546,3312	10453,6687 37
24	9521,3488	9974,6142	9546,7346	10453,2654 36
25	9521,7073	9974,5697	9547,1376	10452,8623 35
26	9522,0656	9974,5251	9547,5404	10452,4595 34
27	9522,4235	9974,4805	9547,9429	10452,0570 33
28	9522,7811	9974,4359	9548,3451	10451,6548 32
29	9523,1383	9974,3912	9548,7470	10451,2529 31
30	9523,4952	9974,3465	9549,1487	10450,8513 30
	Sin. 70.		Tan. 70.	
				M



M	Sin. 19.		Tan. 19.		
30	9523,4952	9974,3465	9549,1487	10450,8513	30
31	9523,8516	9974,3018	9549,5500	10450,4499	29
32	9524,2080	9974,2570	9549,9511	10450,0489	28
33	9524,5640	9974,2121	9550,3518	10449,6481	27
34	9524,9196	9974,1672	9550,7523	10449,2476	26
35	9525,2748	9974,1223	9551,1525	10448,8474	25
36	9525,6298	9974,0774	9551,5524	10448,4475	24
37	9525,9844	9974,0324	9551,9520	10448,0479	23
38	9526,3387	9973,9873	9552,3514	10447,6486	22
39	9526,6927	9973,9422	9552,7504	10447,2495	21
40	9527,0463	9973,8971	9553,1492	10446,8507	20
41	9527,3996	9973,8519	9553,5477	10446,4522	19
42	9527,7526	9973,8067	9553,9459	10446,0540	18
43	9528,1053	9973,7614	9554,3438	10445,6561	17
44	9528,4576	9973,7161	9554,7414	10445,2585	16
45	9528,8096	9973,6708	9555,1388	10444,8611	15
46	9529,1613	9973,6254	9555,5359	10444,4641	14
47	9529,5127	9973,5800	9555,9327	10444,0673	13
48	9529,8638	9973,5346	9556,3292	10443,6707	12
49	9530,2145	9973,4890	9556,7254	10443,2745	11
50	9530,5649	9973,4435	9557,1214	10442,8785	10
51	9530,9150	9973,3979	9557,5171	10442,4828	9
52	9531,2648	9973,3523	9557,9125	10442,0874	8
53	9531,6143	9973,3066	9558,3076	10441,6923	7
54	9531,9634	9973,2609	9558,7025	10441,2974	6
55	9532,3123	9973,2152	9559,0971	10440,9029	5
56	9532,6608	9973,1694	9559,4914	10440,5086	4
57	9533,0090	9973,1235	9559,8854	10440,1145	3
58	9533,3568	9973,0777	9560,2791	10439,7208	2
59	9533,7044	9973,0317	9560,6726	10439,3273	1
60	9534,0516	9972,9858	9561,0658	10438,9341	0
		Sin. 70.		Tan. 70.	M

M	Sin. 20.		Tan. 20.	
0	9534,0516	9972,9858	9561,0658	10438,9341 60
1	9534,3986	9972,9398	9561,4588	10438,5411 59
2	9534,7452	9972,8937	9561,8514	10438,1485 58
3	9535,0915	9972,8476	9562,2438	10437,7561 57
4	9535,4375	9972,8015	9562,6359	10437,3640 56
5	9535,7832	9972,7554	9563,0278	10436,9721 55
6	9536,1286	9972,7091	9563,4194	10436,5805 54
7	9536,4736	9972,6629	9563,8107	10436,1892 53
8	9536,8184	9972,6166	9564,2017	10435,7982 52
9	9537,1628	9972,5703	9564,5925	10435,4074 51
10	9537,5069	9972,5239	9564,9830	10435,0169 50
11	9537,8508	9972,4775	9565,3733	10434,6267 49
12	9538,1943	9972,4310	9565,7632	10434,2367 48
13	9538,5375	9972,3845	9566,1530	10433,8470 47
14	9538,8804	9972,3380	9566,5424	10433,4575 46
15	9539,2230	9972,2914	9566,9316	10433,0684 45
16	9539,5653	9972,2448	9567,3205	10432,6795 44
17	9539,9072	9972,1981	9567,7091	10432,2908 43
18	9540,2489	9972,1514	9568,0975	10431,9024 42
19	9540,5903	9972,1046	9568,4856	10431,5143 41
20	9540,9313	9972,0578	9568,8735	10431,1255 40
21	9541,2721	9972,0110	9569,2610	10430,7389 39
22	9541,6125	9971,9641	9569,6484	10430,3515 38
23	9541,9527	9971,9172	9570,0354	10429,9645 37
24	9542,2925	9971,8702	9570,4222	10429,5777 36
25	9542,6321	9971,8232	9570,8088	10429,1911 35
26	9542,9713	9971,7762	9571,1951	10428,8048 34
27	9543,3102	9971,7291	9571,5811	10428,4188 33
28	9543,6489	9971,6820	9571,9669	10428,0330 32
29	9543,9872	9971,6348	9572,3524	10427,6475 31
30	9544,3253	9971,5876	9572,7376	10427,2623 30
	Sin. 69.		Tan. 69.	
				M

M	Sin. 20.		Tan. 20.		
30	9544,3253	9971,5876	9572,7376	10417,2623	30
31	9544,6630	9971,5403	9573,1226	10416,8773	29
32	9545,0004	9971,4930	9573,5074	10416,4925	28
33	9545,3376	9971,4457	9573,8918	10416,1081	27
34	9545,6744	9971,3983	9574,2761	10415,7239	26
35	9546,0110	9971,3509	9574,6600	10415,3399	25
36	9546,3472	9971,3034	9575,0437	10414,9562	24
37	9546,6832	9971,2559	9575,4272	10414,5727	23
38	9547,0188	9971,2084	9575,8104	10414,1895	22
39	9547,3542	9971,1608	9576,1933	10413,8066	21
40	9547,6892	9971,1131	9576,5760	10413,4239	20
41	9548,0240	9971,0655	9576,9585	10413,0414	19
42	9548,3585	9971,0178	9577,3407	10412,6592	18
43	9548,6926	9970,9700	9577,7226	10412,2773	17
44	9549,0265	9970,9222	9578,1043	10411,8956	16
45	9549,3601	9970,8744	9578,4857	10411,5142	15
46	9549,6934	9970,8265	9578,8669	10411,1330	14
47	9550,0264	9970,7786	9579,2478	10410,7521	13
48	9550,3591	9970,7306	9579,6285	10410,3714	12
49	9550,6916	9970,6826	9580,0090	10419,9910	11
50	9551,0237	9970,6345	9580,3891	10419,6108	10
51	9551,3555	9970,5864	9580,7691	10419,2308	9
52	9551,6871	9970,5383	9581,1488	10418,8512	8
53	9552,0184	9970,4901	9581,5282	10418,4717	7
54	9552,3493	9970,4419	9581,9074	10418,0925	6
55	9552,6800	9970,3936	9582,2864	10417,7136	5
56	9553,0104	9970,3453	9582,6651	10417,3349	4
57	9553,3405	9970,2970	9583,0435	10416,9564	3
58	9553,6703	9970,2486	9583,4217	10416,5782	2
59	9553,9999	9970,2002	9583,7997	10416,2002	1
60	9554,3291	9970,1517	9584,1774	10415,8225	0
		Sin. 69.		Tan. 69.	M

M	Sin. 21.		Tan. 21.		
0	9554,3291	9970,1517	9584,1774	10415,8225	60
1	9554,6581	9970,1032	9584,5549	10415,4451	59
2	9554,9868	9970,0546	9584,9321	10415,0678	58
3	9555,3151	9970,0060	9585,3091	10414,6908	57
4	9555,6433	9969,9574	9585,6858	10414,3141	56
5	9555,9711	9969,9087	9586,0623	10413,9376	55
6	9556,2986	9969,8600	9586,4386	10413,5613	54
7	9556,6259	9969,8112	9586,8146	10413,1853	53
8	9556,9528	9969,7624	9587,1904	10412,8095	52
9	9557,2795	9969,7135	9587,5659	10412,4340	51
10	9557,6059	9969,6647	9587,9412	10412,0587	50
11	9557,9320	9969,6157	9588,3163	10411,6836	49
12	9558,2579	9969,5667	9588,6911	10411,3088	48
13	9558,5835	9969,5177	9589,0657	10410,9342	47
14	9558,9087	9969,4686	9589,4401	10410,5599	46
15	9559,2337	9969,4195	9589,8142	10410,1858	45
16	9559,5585	9969,3704	9590,1880	10409,8119	44
17	9559,8829	9969,3212	9590,5617	10409,4383	43
18	9560,2071	9969,2720	9590,9351	10409,0649	42
19	9560,5309	9969,2227	9591,3082	10408,6917	41
20	9560,8546	9969,1734	9591,6811	10408,3188	40
21	9561,1779	9969,1240	9592,0538	10407,9461	39
22	9561,5009	9969,0746	9592,4263	10407,5736	38
23	9561,8237	9969,0252	9592,7985	10407,2014	37
24	9562,1462	9968,9757	9593,1705	10406,8294	36
25	9562,4684	9968,9261	9593,5422	10406,4577	35
26	9562,7904	9968,8766	9593,9137	10406,0862	34
27	9563,1120	9968,8270	9594,2850	10405,7149	33
28	9563,4334	9968,7773	9594,6561	10405,3438	32
29	9563,7545	9968,7276	9595,0269	10404,9730	31
30	9564,0754	9968,6779	9595,3975	10404,6024	30
		Sin. 68.		Tan. 68.	M



M	- Sin. 21		Tan. 21.		
30	9564,0754	9968,6779	9595,3975	10404,6024	30
31	9564,3960	9968,6281	9595,7678	10404,2321	29
32	9564,7163	9968,5783	9596,1380	10403,8619	28
33	9565,0363	9968,5284	9596,5079	10403,4920	27
34	9565,3560	9968,4785	9596,8776	10403,1224	26
35	9565,6755	9968,4285	9597,2470	10402,7529	25
36	9565,9947	9968,3785	9597,6162	10402,3837	24
37	9566,3137	9968,3285	9597,9852	10402,0147	23
38	9566,6324	9968,2784	9598,3539	10401,6460	22
39	9566,9508	9968,2283	9598,7224	10401,2775	21
40	9567,2689	9968,1781	9599,0907	10400,9092	20
41	9567,5867	9968,1279	9599,4588	10400,5411	19
42	9567,9043	9968,0776	9599,8267	10400,1733	18
43	9568,2217	9968,0274	9600,1943	10399,8057	17
44	9568,5387	9967,9770	9600,5617	10399,4383	16
45	9568,8555	9967,9266	9600,9288	10399,0711	15
46	9569,1720	9967,8762	9601,2958	10398,7041	14
47	9569,4883	9967,8257	9601,6625	10398,3374	13
48	9569,8042	9967,7752	9602,0290	10397,9709	12
49	9570,1200	9967,7247	9602,3952	10397,6047	11
50	9570,4354	9967,6741	9602,7613	10397,2386	10
51	9570,7506	9967,6235	9603,1271	10396,8728	9
52	9571,0655	9967,5728	9603,4927	10396,5072	8
53	9571,3802	9967,5221	9603,8581	10396,1418	7
54	9571,6946	9967,4713	9604,2232	10395,7767	6
55	9572,0087	9967,4205	9604,5881	10395,4118	5
56	9572,3225	9967,3697	9604,9529	10395,0471	4
57	9572,6362	9967,3188	9605,3174	10394,6826	3
58	9572,9495	9967,2678	9605,6816	10394,3183	2
59	9573,2626	9967,2168	9605,0457	10393,9542	1
60	9573,5754	9967,1658	9606,4095	10393,5904	0
		Sin. 68.		Tan. 68.	VI

M	Sin. 22.		Tan. 22.		
0	9573,5754	9967,1658	9606,4095	10393,5904	60
1	9573,8879	9967,1147	9606,7731	10393,2268	59
2	9574,2002	9967,0636	9607,1365	10392,8634	58
3	9574,5122	9967,0125	9607,4997	10392,5002	57
4	9574,8240	9966,9613	9607,8627	10392,1372	56
5	9575,1355	9966,9101	9608,2254	10391,7745	55
6	9575,4468	9966,8588	9608,5879	10391,4120	54
7	9575,7578	9966,8075	9608,9502	10391,0497	53
8	9576,0685	9966,7561	9609,3123	10390,6876	52
9	9576,3789	9966,7047	9609,6742	10390,3257	51
10	9576,6892	9966,6533	9610,0359	10389,9641	50
11	9576,9991	9966,6018	9610,3973	10389,6026	49
12	9577,3088	9966,5502	9610,7585	10389,2414	48
13	9577,6182	9966,4987	9611,1195	10388,8804	47
14	9577,9274	9966,4470	9611,4803	10388,5196	46
15	9578,2363	9966,3954	9611,8409	10388,1590	45
16	9578,5450	9966,3437	9612,2013	10387,7986	44
17	9578,8534	9966,2919	9612,5614	10387,4385	43
18	9579,1616	9966,2401	9612,9214	10387,0785	42
19	9579,4695	9966,1883	9613,2811	10386,7188	41
20	9579,7771	9966,1364	9613,6407	10386,3593	40
21	9580,0845	9966,0845	9614,0000	10386,0000	39
22	9580,3916	9966,0325	9614,3591	10385,6409	38
23	9580,6985	9965,9805	9614,7179	10385,2820	37
24	9581,0051	9965,9285	9615,0766	10384,9233	36
25	9581,3115	9965,8764	9615,4351	10384,5648	35
26	9581,6176	9965,8243	9615,7933	10384,2066	34
27	9581,9235	9965,7721	9616,1514	10383,8485	33
28	9582,2291	9965,7199	9616,5092	10383,4907	32
29	9582,5345	9965,6676	9616,8669	10383,1331	31
30	9582,8396	9965,6153	9617,2243	10382,7756	30
		Sin. 67.		Tan. 67.	M

M	Sim. 22.		Tan. 22.		
30	9582,8396	9965,6153	9617,2243	10382,7756	30
31	9583,1445	9965,5629	9617,5815	10382,4184	29
32	9583,4491	9965,5106	9617,9385	10382,0614	28
33	9583,7535	9965,4581	9618,2953	10381,7046	27
34	9584,0576	9965,4057	9618,6519	10381,3480	26
35	9584,3614	9965,3531	9619,0083	10380,9917	25
36	9584,6650	9965,3006	9619,3644	10380,6355	24
37	9584,9584	9965,2480	9619,7204	10380,2795	23
38	9585,2715	9965,1953	9620,0762	10379,9237	22
39	9585,5744	9965,1426	9620,4318	10379,5681	21
40	9585,8770	9965,0899	9620,7871	10379,2128	20
41	9586,1794	9965,0371	9621,1423	10378,8576	19
42	9586,4815	9964,9843	9621,4972	10378,5027	18
43	9586,7834	9964,9314	9621,8520	10378,1479	17
44	9587,0851	9964,8785	9622,2065	10377,7934	16
45	9587,3864	9964,8255	9622,5609	10377,4390	15
46	9587,6876	9964,7725	9622,9150	10377,0849	14
47	9587,9835	9964,7195	9623,2690	10376,7310	13
48	9588,2891	9964,6664	9623,6227	10376,3772	12
49	9588,5895	9964,6133	9623,9762	10376,0237	11
50	9588,8897	9964,5601	9624,3296	10375,6704	10
51	9589,1896	9964,5069	9624,6827	10375,3172	9
52	9589,4893	9964,4536	9625,0356	10374,9643	8
53	9589,7887	9964,4003	9625,3883	10374,6116	7
54	9590,0879	9964,3470	9625,7409	10374,2590	6
55	9590,3869	9964,2936	9626,0932	10373,9067	5
56	9590,6856	9964,2402	9626,4453	10373,5546	4
57	9590,9840	9964,1867	9626,7973	10373,2026	3
58	9591,2823	9964,1332	9627,1490	10372,8509	2
59	9591,5802	9964,0796	9627,5006	10372,4994	1
60	9591,8780	9964,0260	9627,8519	10372,1480	0
	Sin. 67.			Tan. 67.	
					M

M	Sin. 23.		Tan. 23.		
0	9591,8780	9964,0260	9627,8519	10372,1480	60
1	9592,1755	9963,9724	9628,2030	10371,7969	59
2	9592,4727	9963,9187	9628,5540	10371,4459	58
3	9592,7697	9963,8650	9628,9047	10371,0952	57
4	9593,0665	9963,8112	9629,2553	10370,7446	56
5	9593,3631	9963,7574	9629,6057	10370,3943	55
6	9593,6594	9963,7035	9629,9558	10370,0441	54
7	9593,9554	9963,6496	9630,3057	10369,6942	53
8	9594,2512	9963,5957	9630,6555	10369,3444	52
9	9594,5468	9963,5417	9631,0051	10368,9948	51
10	9594,8422	9963,4876	9631,3545	10368,6454	50
11	9595,1373	9963,4335	9631,7037	10368,2962	49
12	9595,4321	9963,3794	9632,0527	10367,9472	48
13	9595,7268	9963,3253	9632,4015	10367,5984	47
14	9596,0212	9963,2710	9632,7501	10367,2498	46
15	9596,3153	9963,2168	9633,0985	10366,9014	45
16	9596,6093	9963,1625	9633,4467	10366,5532	44
17	9596,9030	9963,1081	9633,7948	10366,2051	43
18	9597,1964	9963,0538	9634,1426	10365,8573	42
19	9597,4896	9962,9993	9634,4903	10365,5097	41
20	9597,7826	9962,9449	9634,8377	10365,1622	40
21	9598,0754	9962,8904	9635,1850	10364,8149	39
22	9598,3679	9962,8358	9635,5321	10364,4679	38
23	9598,6602	9962,7812	9635,8790	10364,1210	37
4	9598,9522	9962,7265	9636,2256	10363,7743	36
25	9599,2440	9962,6718	9636,5722	10363,4278	35
26	9599,5356	9962,6171	9636,9185	10363,0815	34
27	9599,8270	9962,5623	9637,2646	10362,7353	33
28	9600,1181	9962,5075	9637,6105	10362,3894	32
29	9600,4090	9962,4527	9637,9563	10362,0436	31
30	9600,6997	9962,3977	9638,3019	10361,6981	30
		Sin. 66.		Tan. 66.	M



M	Sin. 23.		Tan. 23.		
30	9600,6997	9962,3977	9638,3019	10361,6981	30
31	9600,9901	9962,3428	9638,6472	10361,3527	29
32	9601,2803	9962,2878	9638,9924	10361,0075	28
33	9601,5702	9962,2328	9639,3374	10360,6625	27
34	9601,8600	9962,1777	9639,6823	10360,3177	26
35	9602,1495	9962,1225	9640,0269	10359,9730	25
36	9602,4387	9962,0674	9640,3713	10359,6286	24
37	9602,7278	9962,0122	9640,7156	10359,2843	23
38	9603,0166	9961,9569	9641,0597	10358,9402	22
39	9603,3052	9961,9016	9641,4036	10358,5964	21
40	9603,5936	9961,8463	9641,7473	10358,2527	20
41	9603,8817	9961,7909	9642,0908	10357,9091	19
42	9604,1696	9961,7354	9642,4341	10357,5658	18
43	9604,4573	9961,6799	9642,7773	10357,2226	17
44	9604,7447	9961,6244	9643,1203	10356,8797	16
45	9605,0319	9961,5689	9643,4630	10356,5369	15
46	9605,3189	9961,5133	9643,8056	10356,1943	14
47	9605,6057	9961,4576	9644,1481	10355,8519	13
48	9605,8922	9961,4019	9644,4903	10355,5096	12
49	9606,1786	9961,3462	9644,8324	10355,1676	11
50	9606,4646	9961,2904	9645,1742	10354,8257	10
51	9606,7505	9961,2346	9645,5159	10354,4840	9
52	9607,0362	9961,1787	9645,8575	10354,1425	8
53	9607,3216	9961,1228	9646,1988	10353,8011	7
54	9607,6068	9961,0668	9646,5399	10353,4600	6
55	9607,8918	9961,0108	9646,8809	10353,1190	5
56	9608,1765	9960,9548	9647,2217	10352,7782	4
57	9608,4610	9960,8987	9647,5623	10352,4376	3
58	9608,7453	9960,8425	9647,9028	10352,0972	2
59	9609,0294	9960,7863	9648,2430	10351,7569	1
60	9609,3133	9960,7301	9648,5831	10351,4168	0
		Sin. 66.		Tan. 66.	M

M	Sin. 24.		Tan. 24.		
0	9609,3133	9960,7301	9648,5831	10351,4168	60
1	9609,5969	9960,6738	9648,9230	10351,0769	59
2	9609,8803	9960,6175	9649,2627	10350,7372	58
3	9610,1635	9960,5612	9649,6023	10350,3976	57
4	9610,4465	9960,5048	9649,9416	10350,0583	56
5	9610,7292	9960,4483	9650,2808	10349,7191	55
6	9611,0117	9960,3919	9650,6198	10349,3801	54
7	9611,2940	9960,3353	9650,9587	10349,0412	53
8	9611,5761	9960,2787	9651,2974	10348,7026	52
9	9611,8580	9960,2221	9651,6358	10348,3641	51
10	9612,1396	9960,1655	9651,9742	10348,0258	50
11	9612,4211	9960,1087	9652,3123	10347,6876	49
12	9612,7023	9960,0520	9652,6503	10347,3497	48
13	9612,9833	9959,9952	9652,9881	10347,0119	47
14	9613,2641	9959,9383	9653,3257	10346,6742	46
15	9613,5446	9959,8815	9653,6631	10346,3368	45
16	9613,8249	9959,8245	9654,0004	10345,9995	44
17	9614,1051	9959,7676	9654,3375	10345,6624	43
18	9614,3850	9959,7105	9654,6744	10345,3255	42
19	9614,6646	9959,6535	9655,0111	10344,9888	41
20	9614,9441	9959,5964	9655,3477	10344,6522	40
21	9615,2234	9959,5392	9655,6841	10344,3158	39
22	9615,5024	9959,4820	9656,0203	10343,9796	38
23	9615,7812	9959,4248	9656,3564	10343,6435	37
24	9616,0598	9959,3675	9656,6923	10343,3077	36
25	9616,3382	9959,3102	9657,0280	10342,9719	35
26	9616,6164	9959,2528	9657,3635	10342,6364	34
27	9616,8943	9959,1954	9657,6989	10342,3010	33
28	9617,1721	9959,1379	9658,0341	10341,9658	32
29	9617,4496	9959,0804	9658,3692	10341,6307	31
30	9617,7269	9959,0229	9658,7040	10341,2959	30
		Sin. 65.		Tan. 65.	M

M	Sin. 24.		Tan. 24.		
30	9617,7269	9959,0229	9658,7040	10341,2959	30
31	9618,0040	9958,9653	9659,0387	10340,9612	29
32	9618,2809	9958,9076	9659,3732	10340,6267	28
33	9618,5576	9958,8500	9659,7076	10340,2923	27
34	9618,8340	9958,7922	9660,0418	10339,9581	26
35	9619,1103	9958,7344	9660,3758	10339,6241	25
36	9619,3863	9958,6766	9660,7097	10339,2903	24
37	9619,6622	9958,6188	9661,0434	10338,9566	23
38	9619,9378	9958,5609	9661,3769	10338,6230	22
39	9620,2132	9958,5029	9661,7102	10338,2897	21
40	9620,4884	9958,4449	9662,0434	10337,9565	20
41	9620,7633	9958,3869	9662,3764	10337,6235	19
42	9621,0381	9958,3288	9662,7093	10337,2906	18
43	9621,3127	9958,2707	9663,0420	10336,9579	17
44	9621,5870	9958,2125	9663,3745	10336,6254	16
45	9621,8612	9958,1543	9663,7068	10336,2931	15
46	9622,1351	9958,0960	9664,0390	10335,9609	14
47	9622,4088	9958,0377	9664,3711	10335,6289	13
48	9622,6823	9957,9794	9664,7029	10335,2970	12
49	9622,9556	9957,9210	9665,0346	10334,9653	11
50	9623,2287	9957,8625	9665,3661	10334,6338	10
51	9623,5016	9957,8040	9665,6975	10334,3024	9
52	9623,7743	9957,7455	9666,0287	10333,9712	8
53	9624,0467	9957,6869	9666,3598	10333,6401	7
54	9624,3190	9957,6283	9666,6906	10333,3093	6
55	9624,5911	9957,5697	9667,0214	10332,9786	5
56	9624,8629	9957,5109	9667,3519	10332,6480	4
57	9625,1345	9957,4522	9667,6823	10332,3176	3
58	9625,4060	9957,3934	9668,0125	10331,9874	2
59	9625,6772	9957,3346	9668,3426	10331,6573	1
60	9625,9482	9957,2757	9668,6725	10331,3274	0
		Sin. 65.		Tan. 65.	M

M	Sin. 25.		Tan. 25.	
0	9625,9482	9957,2757	9668,6725	10331,3274 60
1	9626,2190	9957,2167	9669,0023	10330,9976 59
2	9626,4897	9957,1578	9669,3319	10330,6681 58
3	9626,7601	9957,0987	9669,6613	10330,3386 57
4	9627,0303	9957,0397	9669,9905	10330,0094 56
5	9627,3002	9956,9806	9670,3196	10329,6803 55
6	9627,5700	9956,9214	9670,6486	10329,3513 54
7	9627,8396	9956,8622	9670,9774	10329,0225 53
8	9628,1090	9956,8030	9671,3060	10328,6939 52
9	9628,3782	9956,7437	9671,6345	10328,3655 51
10	9628,6471	9956,6843	9671,9628	10328,0371 50
11	9628,9159	9956,6250	9672,2909	10327,7090 49
12	9629,1845	9956,5655	9672,6189	10327,3810 48
13	9629,4529	9956,5061	9672,9468	10327,0532 47
14	9629,7210	9956,4465	9673,2744	10326,7255 46
15	9629,9890	9956,3870	9673,6020	10326,3980 45
16	9630,2567	9956,3274	9673,9293	10326,0706 44
17	9630,5243	9956,2677	9674,2565	10325,7434 43
18	9630,7917	9956,2080	9674,5836	10325,4163 42
19	9631,0588	9956,1483	9674,9105	10325,0894 41
20	9631,3258	9956,0885	9675,2372	10324,7627 40
21	9631,5925	9956,0287	9675,5638	10324,4361 39
22	9631,8591	9955,9688	9675,8902	10324,1097 38
23	9632,1254	9955,9089	9676,2165	10323,7834 37
24	9632,3916	9955,8489	9676,5426	10323,4573 36
25	9632,6575	9955,7889	9676,8686	10323,1313 35
26	9632,9233	9955,7289	9677,1944	10322,8055 34
27	9633,1888	9955,6688	9677,5200	10322,4799 33
28	9633,4542	9955,6086	9677,8455	10322,1544 32
29	9633,7194	9955,5484	9678,1709	10321,8290 31
30	9633,9843	9955,4882	9678,4961	10321,5038 30
	Sin. 64.		Tan. 64.	
				M



M	Sim. 25.		Tan. 25.		
30	9633,9843	9955,4882	9678,4961	10321,5038	30
31	9634,2491	9955,4279	9678,8211	10321,1788	29
32	9634,5136	9955,3676	9679,1460	10320,8539	28
33	9634,7780	9955,3072	9679,4707	10320,5292	27
34	9635,0422	9955,2468	9679,7953	10320,2046	26
35	9635,3061	9955,1864	9680,1197	10319,8802	25
36	9635,5699	9955,1259	9680,4440	10319,5559	24
37	9635,8335	9955,0653	9680,7682	10319,2318	23
38	9636,0969	9955,0047	9681,0921	10318,9078	22
39	9636,3600	9954,9441	9681,4159	10318,5840	21
40	9636,6230	9954,8834	9681,7396	10318,2603	20
41	9636,8858	9954,8226	9682,0631	10317,9368	19
42	9637,1484	9954,7619	9682,3865	10317,6134	18
43	9637,4103	9954,7011	9682,7097	10317,2902	17
44	9637,6730	9954,6402	9683,0328	10316,9671	16
45	9637,9350	9954,5793	9683,3557	10316,6442	15
46	9638,1968	9954,5183	9683,6785	10316,3214	14
47	9638,4585	9954,4573	9684,0011	10315,9988	13
48	9638,7199	9954,3963	9684,3236	10315,6763	12
49	9638,9811	9954,3352	9684,6459	10315,3540	11
50	9639,2422	9954,2740	9684,9681	10315,0318	10
51	9639,5030	9954,2128	9685,2901	10314,7098	9
52	9639,7636	9954,1516	9685,6120	10314,3879	8
53	9640,0241	9954,0903	9685,9337	10314,0662	7
54	9640,2844	9954,0290	9686,2553	10313,7446	6
55	9640,5444	9953,9677	9686,5767	10313,4232	5
56	9640,8043	9953,9062	9686,8980	10313,1019	4
57	9641,0640	9953,8448	9687,2192	10312,7807	3
58	9641,3235	9953,7833	9687,5402	10312,4597	2
59	9641,5828	9953,7217	9687,8610	10312,1389	1
60	9641,8419	9953,6601	9688,1817	10311,8182	0
		Sim. 64.		Tan. 64.	M

M	Sin. 26.		Tan. 26.		
0	9641,8419	9953,6601	9688,1817	10311,8182	60
1	9642,1008	9953,5985	9688,5023	10311,4976	59
2	9642,3596	9953,5368	9688,8227	10311,1772	58
3	9642,6181	9953,4751	9689,1430	10310,8569	57
4	9642,8765	9953,4133	9689,4631	10310,5368	56
5	9643,1346	9953,3515	9689,7831	10310,2168	55
6	9643,3926	9953,2896	9690,1029	10309,8970	54
7	9643,6504	9953,2277	9690,4226	10309,5773	53
8	9643,9080	9953,1658	9690,7422	10309,2578	52
9	9644,1654	9953,1038	9691,0616	10308,9384	51
10	9644,4226	9953,0417	9691,3808	10308,6191	50
11	9644,6796	9952,9796	9691,6999	10308,3000	49
12	9644,9364	9952,9175	9692,0189	10307,9810	48
13	9645,1931	9952,8553	9692,3378	10307,6622	47
14	9645,4495	9952,7931	9692,6564	10307,3435	46
15	9645,7058	9952,7308	9692,9750	10307,0249	45
16	9645,9619	9952,6685	9693,2934	10306,7065	44
17	9646,2178	9952,6061	9693,6116	10306,3883	43
18	9646,4735	9952,5437	9693,9298	10306,0702	42
19	9646,7290	9952,4812	9694,2478	10305,7522	41
20	9646,9843	9952,4187	9694,5656	10305,4343	40
21	9647,2395	9952,3562	9694,8833	10305,1167	39
22	9647,4944	9952,2936	9695,2008	10304,7991	38
23	9647,7492	9952,2309	9695,5182	10304,4817	37
24	9648,0038	9952,1682	9695,8355	10304,1644	36
25	9648,2582	9952,1055	9696,1526	10303,8473	35
26	9648,5124	9952,0427	9696,4696	10303,5303	34
27	9648,7664	9951,9799	9696,7865	10303,2134	33
28	9649,0203	9951,9170	9697,1032	10302,8967	32
29	9649,2739	9951,8541	9697,4198	10302,5801	31
30	9649,5274	9951,7911	9697,7362	10302,2637	30
		Sin. 63.		Tan. 63.	M

M	Sin. 26.		Tan. 26.		
30	9649,5274	9951,7911	9697,7362	10302,2637	30
31	9649,7807	9951,7281	9698,0525	10301,9474	29
32	9650,0338	9951,6651	9698,3687	10301,6312	28
33	9650,2867	9951,6020	9698,6847	10301,3152	27
34	9650,5394	9951,5388	9699,0006	10300,9993	26
35	9650,7920	9951,4756	9699,3163	10300,6836	25
36	9651,0444	9951,4124	9699,6319	10300,3680	24
37	9651,2965	9951,3491	9699,9474	10300,0525	23
38	9651,5485	9951,2858	9700,2627	10299,7372	22
39	9651,8004	9951,2224	9700,5779	10299,4220	21
40	9652,0520	9951,1590	9700,8930	10299,1069	20
41	9652,3035	9951,0955	9701,2079	10298,7920	19
42	9652,5547	9951,0320	9701,5227	10298,4773	18
43	9652,8058	9950,9684	9701,8373	10298,1626	17
44	9653,0567	9950,9048	9702,1518	10297,8481	16
45	9653,3075	9950,8412	9702,4663	10297,5337	15
46	9653,5580	9950,7775	9702,7805	10297,2194	14
47	9653,8084	9950,7137	9703,0946	10295,9053	13
48	9654,0586	9950,6499	9703,4086	10296,5913	12
49	9654,3086	9950,5861	9703,7224	10296,2775	11
50	9654,5584	9950,5222	9704,0361	10295,9638	10
51	9654,8080	9950,4583	9704,3497	10295,6502	9
52	9655,0575	9950,3943	9704,5631	10295,3368	8
53	9655,3068	9950,3303	9704,9764	10295,0235	7
54	9655,5559	9950,2662	9705,2896	10294,7103	6
55	9655,8048	9950,2021	9705,6026	10294,3973	5
56	9656,0535	9950,1380	9705,9155	10294,0844	4
57	9656,3021	9950,0737	9706,2283	10293,7716	3
58	9656,5505	9950,0095	9706,5410	10293,4590	2
59	9656,7987	9949,9452	9706,8535	10293,1464	1
60	9657,0467	9949,8808	9707,1658	10292,8341	0
		Sin. 63.		Tan. 63.	M

M	Sin. 27.		Tan. 27.		
0	9657,0467	9949,8808	9707,1658	10292,8341	60
1	9657,2946	9949,8165	9707,4781	10292,5218	59
2	9657,5422	9949,7520	9707,7902	10292,2097	58
3	9657,7897	9949,6875	9708,1022	10291,8977	57
4	9658,0371	9949,6230	9708,4140	10291,5859	56
5	9658,2842	9949,5584	9708,7257	10291,2742	55
6	9658,5312	9949,4938	9709,0373	10290,9626	54
7	9658,7779	9949,4291	9709,3488	10290,6511	53
8	9659,0246	9949,3644	9709,6601	10290,3398	52
9	9659,2710	9949,2996	9709,9713	10290,0286	51
10	9659,5172	9949,2348	9710,2824	10289,7176	50
11	9659,7633	9949,1700	9710,5933	10289,4066	49
12	9660,0092	9949,1051	9710,9041	10289,0958	48
13	9660,2549	9949,0401	9711,2148	10288,7851	47
14	9660,5005	9948,9751	9711,5253	10288,4746	46
15	9660,7459	9948,9101	9711,8357	10288,1642	45
16	9660,9911	9948,8450	9712,1460	10287,8539	44
17	9661,2361	9948,7799	9712,4562	10287,5438	43
18	9661,4809	9948,7147	9712,7662	10287,2337	42
19	9661,7256	9948,6495	9713,0761	10286,9238	41
20	9661,9701	9948,5842	9713,3859	10286,6140	40
21	9662,2144	9948,5189	9713,6955	10286,3044	39
22	9662,4586	9948,4535	9714,0051	10285,9949	38
23	9662,7026	9948,3881	9714,3144	10285,6855	37
24	9662,9464	9948,3226	9714,6237	10285,3762	36
25	9663,1900	9948,2571	9714,9329	10285,0671	35
26	9663,4335	9948,1916	9715,2419	10284,7581	34
27	9663,6767	9948,1260	9715,5507	10284,4492	33
28	9663,9199	9948,0603	9715,8595	10284,1404	32
29	9664,1628	9947,9946	9716,1681	10283,8318	31
30	9664,4056	9947,9289	9716,4766	10283,5233	30
		Sin. 62.		Tan. 62.	M



M	Sin. 27.		Tan. 27.		
30	9664,4356	9947,9289	9716,4766	10283,5233	30
31	9664,6482	9947,8631	9716,7850	10283,2149	29
32	9664,8906	9947,7973	9717,0933	10282,9066	28
33	9665,1328	9947,7314	9717,4014	10282,5985	27
34	9665,3749	9947,6655	9717,7094	10282,2905	26
35	9665,6168	9947,5995	9718,0173	10281,9826	25
36	9665,8589	9947,5335	9718,3250	10281,6749	24
37	9666,1001	9947,4674	9718,6327	10281,3672	23
38	9666,3415	9947,4013	9718,9402	10281,0597	22
39	9666,5827	9947,3351	9719,2476	10280,7523	21
40	9666,8238	9947,2689	9719,5548	10280,4451	20
41	9667,0647	9947,2027	9719,8620	10280,1380	19
42	9667,3054	9947,1364	9720,1690	10279,8309	18
43	9667,5459	9947,0700	9720,4759	10279,5240	17
44	9667,7863	9947,0036	9720,7826	10279,2173	16
45	9668,0269	9946,9372	9721,0893	10278,9106	15
46	9668,2665	9946,8707	9721,3958	10278,6041	14
47	9668,5064	9946,8041	9721,7022	10278,2977	13
48	9668,7461	9946,7376	9722,0085	10277,9914	12
49	9668,9856	9946,6709	9722,3146	10277,6853	11
50	9669,2249	9946,6043	9722,6205	10277,3793	10
51	9669,4641	9946,5375	9722,9266	10277,0734	9
52	9669,7031	9946,4708	9723,2324	10276,7676	8
53	9669,9420	9946,4039	9723,5380	10276,4619	7
54	9670,1807	9946,3371	9723,8436	10276,1563	6
55	9670,4192	9946,2702	9724,1490	10275,8509	5
56	9670,6575	9946,2032	9724,4543	10275,5456	4
57	9670,8957	9946,1362	9724,7595	10275,2404	3
58	9671,1337	9946,0691	9725,0646	10274,9354	2
59	9671,3716	9946,0020	9725,3695	10274,6304	1
60	9671,6093	9945,9349	9725,6743	10274,3256	0
		Sin. 62.		Tan. 62.	M

M	Sin. 28.		Tan. 28.	
0	9671,6093	9945,9349	9725,6743	10274,3256 60
1	9671,8468	9945,8677	9725,9790	10274,0209 59
2	9672,0841	9945,8005	9726,2836	10273,7163 58
3	9672,3213	9945,7332	9726,5881	10273,4118 57
4	9672,5583	9945,6658	9726,8924	10273,1075 56
5	9672,7952	9945,5984	9727,1967	10272,8032 55
6	9673,0318	9945,5310	9727,5008	10272,4991 54
7	9673,2683	9945,4635	9727,8048	10272,1951 53
8	9673,5047	9945,3960	9728,1087	10271,8913 52
9	9673,7409	9945,3284	9728,4124	10271,5875 51
10	9673,9769	9945,2608	9728,7160	10271,2839 50
11	9674,2128	9945,1932	9729,0196	10270,9804 49
12	9674,4484	9945,1254	9729,3230	10270,6770 48
13	9674,6840	9945,0577	9729,6262	10270,3737 47
14	9674,9193	9944,9899	9729,9294	10270,0705 46
15	9675,1545	9944,9220	9730,2325	10269,7674 45
16	9675,3895	9944,8541	9730,5354	10269,4645 44
17	9675,6244	9944,7862	9730,8382	10269,1617 43
18	9675,8591	9944,7182	9731,1409	10268,8590 42
19	9676,0937	9944,6501	9731,4435	10268,5564 41
20	9676,3280	9944,5820	9731,7460	10268,2539 40
21	9676,5622	9944,5139	9732,0483	10267,9516 39
22	9676,7963	9944,4457	9732,3506	10267,6493 38
23	9677,0302	9944,3774	9732,6527	10267,3472 37
24	9677,2639	9944,3092	9732,9547	10267,0452 36
25	9677,4975	9944,2408	9733,2566	10266,7433 35
26	9677,7309	9944,1724	9733,5584	10266,4415 34
27	9677,9641	9944,1040	9733,8601	10266,1399 33
28	9678,1972	9944,0356	9734,1616	10265,8383 32
29	9678,4301	9943,9670	9734,4630	10265,5369 31
30	9678,6629	9943,8985	9734,7644	10265,2356 30
	Sin. 61.		Tan. 61.	
				M

M	Sin. 28.		Tan. 28.		
30	9678,6629	9943,8985	9734,7644	10265,2356	30
31	9678,8955	9943,8298	9735,0656	10264,9343	29
32	9679,1279	9943,7612	9735,3667	10264,6333	28
33	9679,3602	9943,6925	9735,6676	10264,3323	27
34	9679,5923	9943,6237	9735,9685	10264,0314	26
35	9679,8242	9943,5549	9736,2693	10263,7306	25
36	9680,0560	9943,4861	9736,5699	10263,4300	24
37	9680,2876	9943,4172	9736,8704	10263,1295	23
38	9680,5191	9943,3482	9737,1709	10262,8291	22
39	9680,7504	9943,2792	9737,4712	10262,5288	21
40	9680,9816	9943,2102	9737,7714	10262,2286	20
41	9681,2125	9943,1411	9738,0714	10261,9285	19
42	9681,4434	9943,0719	9738,3714	10261,6285	18
43	9681,6740	9943,0027	9738,6713	10261,3287	17
44	9681,9045	9942,9335	9738,9710	10261,0289	16
45	9682,1349	9942,8642	9739,2706	10260,7293	15
46	9682,3651	9942,7949	9739,5702	10260,4298	14
47	9682,5951	9942,7255	9739,8696	10260,1304	13
48	9682,8250	9942,6561	9740,1689	10259,8310	12
49	9683,0547	9942,5866	9740,4681	10259,5318	11
50	9683,2843	9942,5171	9740,7672	10259,2328	10
51	9683,5137	9942,4475	9741,0661	10258,9338	9
52	9683,7429	9942,3779	9741,3650	10258,6349	8
53	9683,9720	9942,3082	9741,6637	10258,3362	7
54	9684,2009	9942,2385	9741,9624	10258,0375	6
55	9684,4297	9942,1688	9742,2609	10257,7390	5
56	9684,6583	9942,0989	9742,5593	10257,4406	4
57	9684,8868	9942,0291	9742,8576	10257,1423	3
58	9685,1151	9941,9592	9743,1559	10256,8441	2
59	9685,3432	9941,8892	9743,4540	10256,5460	1
60	9685,5712	9941,8192	9743,7520	10256,2480	0
		Sin. 61.		Tan. 61.	M

M	Sin. 29.		Tan. 29.		
0	9685,5712	9941,8192	9743,7519	10256,2480	60
1	9685,7990	9941,7492	9744,0498	10255,9501	59
2	9686,0267	9941,6791	9744,3476	10255,6523	58
3	9686,2542	9941,6089	9744,6452	10255,3547	57
4	9686,4816	9941,5387	9744,9428	10255,0571	56
5	9686,7088	9941,4685	9745,2403	10254,7597	55
6	9686,9358	9941,3982	9745,5376	10254,4623	54
7	9687,1627	9941,3279	9745,8348	10254,1651	53
8	9687,3895	9941,2575	9746,1319	10253,8680	52
9	9687,6160	9941,1870	9746,4290	10253,5709	51
10	9687,8425	9941,1165	9746,7259	10253,2740	50
11	9688,0687	9941,0460	9747,0227	10252,9772	49
12	9688,2949	9940,9754	9747,3194	10252,6805	48
13	9688,5208	9940,9048	9747,6160	10252,3839	47
14	9688,7466	9940,8341	9747,9125	10252,0874	46
15	9688,9723	9940,7634	9748,2089	10251,7911	45
16	9689,1978	9940,6926	9748,5051	10251,4948	44
17	9689,4232	9940,6218	9748,8013	10251,1986	43
18	9689,6484	9940,5509	9749,0974	10250,9025	42
19	9689,8734	9940,4800	9749,3933	10250,6056	41
20	9690,0983	9940,4091	9749,6892	10250,3107	40
21	9690,3230	9940,3380	9749,9849	10250,0150	39
22	9690,5476	9940,2670	9750,2806	10249,7193	38
23	9690,7720	9940,1959	9750,5761	10249,4238	37
24	9690,9963	9940,1247	9750,8716	10249,1284	36
25	9691,2204	9940,0535	9751,1669	10248,8330	35
26	9691,4444	9939,9822	9751,4621	10248,5378	34
27	9691,6682	9939,9109	9751,7573	10248,2427	33
28	9691,8919	9939,8396	9752,0523	10247,9476	32
29	9692,1154	9939,7682	9752,3472	10247,6527	31
30	9692,3388	9939,6967	9752,6420	10247,3579	30
		Sin. 60.		Tan. 60.	M



M	Sin. 29.		Tan. 29.		
30	9692,3388	9939,6967	9752,6420	10247,3579	30
31	9692,5620	9939,6252	9752,9367	10247,0632	29
32	9692,7851	9939,5537	9753,2313	10246,7686	28
33	9693,0080	9939,4821	9753,5258	10246,4741	27
34	9693,2307	9939,4104	9753,8203	10246,1797	26
35	9693,4533	9939,3388	9754,1146	10245,8854	25
36	9693,6758	9939,2670	9754,4087	10245,5912	24
37	9693,8981	9939,1952	9754,7028	10245,2971	23
38	9694,1203	9939,1234	9754,9968	10245,0031	22
39	9694,3423	9939,0515	9755,2907	10244,7092	21
40	9694,5641	9938,9796	9755,5845	10244,4154	20
41	9694,7858	9938,9076	9755,8782	10244,1217	19
42	9695,0074	9938,8355	9756,1718	10243,8281	18
43	9695,2288	9938,7635	9756,4653	10243,5346	17
44	9695,4501	9938,6913	9756,7587	10243,2412	16
45	9695,6712	9938,6191	9757,0520	10242,9479	15
46	9695,8921	9938,5469	9757,3452	10242,6548	14
47	9696,1129	9938,4746	9757,6383	10242,3617	13
48	9696,3336	9938,4023	9757,9312	10242,0687	12
49	9696,5541	9938,3299	9758,2241	10241,7758	11
50	9696,7745	9938,2575	9758,5169	10241,4830	10
51	9696,9947	9938,1850	9758,8096	10241,1903	9
52	9697,2148	9938,1125	9759,1022	10240,8977	8
53	9697,4347	9938,0400	9759,3947	10240,6052	7
54	9697,6544	9937,9673	9759,6871	10240,3128	6
55	9697,8741	9937,8947	9759,9794	10240,0206	5
56	9698,0935	9937,8220	9760,2715	10239,7284	4
57	9698,3129	9937,7492	9760,5636	10239,4363	3
58	9698,5320	9937,6764	9760,8556	10239,1443	2
59	9698,7511	9937,6035	9761,1475	10238,8524	1
60	9698,9700	9937,5306	9761,4393	10238,5606	0
		Sin. 60.		Tan. 60.	M

M	Sim. 31.		Tan. 31.		
0	9711,8393	9933,0656	9778,7737	10221,2262	60
1	9712,0495	9932,9896	9779,0598	10220,9401	59
2	9712,2598	9932,9136	9779,3458	10220,6541	58
3	9712,4694	9932,8376	9779,6318	10220,3681	57
4	9712,6792	9932,7615	9779,9176	10220,0823	56
5	9712,8888	9932,6854	9780,2034	10219,7965	55
6	9713,0983	9932,6092	9780,4891	10219,5109	54
7	9713,3077	9932,5330	9780,7747	10219,2253	53
8	9713,5169	9932,4567	9781,0602	10218,9398	52
9	9713,7260	9932,3804	9781,3456	10218,6544	51
10	9713,9349	9932,3040	9781,6309	10218,3690	50
11	9714,1437	9932,2275	9781,9161	10218,0838	49
12	9714,3524	9932,1511	9782,2013	10217,7989	48
13	9714,5609	9932,0745	9782,4863	10217,5136	47
14	9714,7693	9931,9979	9782,7713	10217,2286	46
15	9714,9775	9931,9213	9783,0562	10216,9437	45
16	9715,1857	9931,8446	9783,3410	10216,6589	44
17	9715,3936	9931,7679	9783,6257	10216,3742	43
18	9715,6015	9931,6911	9783,9103	10216,0896	42
19	9715,8092	9931,6143	9784,1949	10215,8050	41
20	9716,0168	9931,5374	9784,4794	10215,5205	40
21	9716,2242	9931,4604	9784,7637	10215,2362	39
22	9716,4315	9931,3835	9785,0480	10214,9519	38
23	9716,6387	9931,3064	9785,3322	10214,6677	37
24	9716,8457	9931,2293	9785,6163	10214,3836	36
25	9717,0526	9931,1522	9785,9004	10214,0995	35
26	9717,2594	9931,0750	9786,1843	10213,8156	34
27	9717,4660	9930,9978	9786,4682	10213,5317	33
28	9717,6725	9930,9205	9786,7520	10213,2479	32
29	9717,8788	9930,8431	9787,0357	10212,9642	31
30	9718,0851	9930,7657	9787,3193	10212,6806	30
		Sim. 58.		Tan. 58.	M

M	Sin. 31.		Tan. 31.		
30	9718,0851	9930,7657	9787,3193	10212,6806	30
31	9718,2912	9930,6883	9787,6028	10212,3971	29
32	9718,4971	9930,6108	9787,8863	10212,1137	28
33	9718,7029	9930,5333	9788,1696	10211,8303	27
34	9718,9086	9930,4557	9788,4529	10211,5470	26
35	9719,1142	9930,3780	9788,7361	10211,2638	25
36	9719,3196	9930,3003	9789,0192	10210,9807	24
37	9719,5249	9930,2226	9789,3022	10210,6977	23
38	9719,7300	9930,1448	9789,5852	10210,4147	22
39	9719,9350	9930,0670	9789,8680	10210,1319	21
40	9720,1399	9929,9891	9790,1508	10209,8491	20
41	9720,3446	9929,9111	9790,4335	10209,5664	19
42	9720,5493	9929,8331	9790,7161	10209,2838	18
43	9720,7537	9929,7551	9790,9986	10209,0013	17
44	9720,9581	9929,6770	9791,2811	10208,7188	16
45	9721,1623	9929,5988	9791,5634	10208,4365	15
46	9721,3664	9929,5206	9791,8457	10208,1542	14
47	9721,5703	9929,4424	9792,1279	10207,8720	13
48	9721,7741	9929,3641	9792,4101	10207,5899	12
49	9721,9778	9929,2857	9792,6921	10207,3078	11
50	9722,1814	9929,2073	9792,9741	10207,0259	10
51	9722,3848	9929,1288	9793,2559	10206,7440	9
52	9722,5881	9929,0503	9793,5377	10206,4622	8
53	9722,7913	9928,9718	9793,8194	10206,1805	7
54	9722,9943	9928,8932	9794,1011	10205,8988	6
55	9723,1972	9928,8145	9794,3826	10205,6173	5
56	9723,3999	9928,7358	9794,6641	10205,3358	4
57	9723,6026	9928,6570	9794,9455	10205,0544	3
58	9723,8051	9928,5782	9795,2268	10204,7731	2
59	9724,0074	9928,4994	9795,5080	10204,4919	1
60	9724,2097	9928,4204	9795,7892	10204,2107	0
		Sin. 58.		Tan. 58.	M

M	Sin. 32.		Tan. 32.		
0	9724,2097	9928,4204	9795,7892	10204,2107	60
1	9724,4118	9928,3415	9796,0703	10203,9297	59
2	9724,6138	9928,2625	9796,3513	10203,6487	58
3	9724,8156	9928,1834	9796,6322	10203,3678	57
4	9725,0173	9928,1043	9796,9130	10203,0869	56
5	9725,2189	9928,0251	9797,1938	10202,8062	55
6	9725,4203	9927,9459	9797,4744	10202,5255	54
7	9725,6217	9927,8666	9797,7550	10202,2449	53
8	9725,8229	9927,7873	9798,0356	10201,9644	52
9	9726,0239	9927,7079	9798,3160	10201,6839	51
10	9726,2249	9927,6285	9798,5964	10201,4036	50
11	9726,4257	9927,5490	9798,8766	10201,1233	49
12	9726,6263	9927,4695	9799,1568	10200,8431	48
13	9726,8269	9927,3899	9799,4370	10200,5629	47
14	9727,0273	9927,3103	9799,7170	10200,2829	46
15	9727,2276	9927,2306	9799,9970	10200,0029	45
16	9727,4278	9927,1508	9800,2769	10199,7230	44
17	9727,6278	9927,0711	9800,5567	10199,4432	43
18	9727,8277	9926,9912	9800,8364	10199,1635	42
19	9728,0275	9926,9113	9801,1161	10198,8838	41
20	9728,2271	9926,8314	9801,3957	10198,6042	40
21	9728,4266	9926,7514	9801,6752	10198,3247	39
22	9728,6260	9926,6713	9801,9546	10198,0453	38
23	9728,8253	9926,5913	9802,2340	10197,7659	37
24	9729,0244	9926,5111	9802,5132	10197,4867	36
25	9729,2234	9926,4309	9802,7924	10197,2075	35
26	9729,4223	9926,3507	9803,0716	10196,9283	34
27	9729,6210	9926,2704	9803,3506	10196,6493	33
28	9729,8196	9926,1900	9803,6296	10196,3703	32
29	9730,0181	9926,1096	9803,9085	10196,0914	31
30	9730,2165	9926,0292	9804,1873	10195,8126	30
	Sin. 57.		Tan. 57.		M



M	Sim. 32.		Tan. 32.		
30	9730,2165	9926,0292	9804,1873	10195,8126	30
31	9730,4147	9925,9486	9804,4660	10195,5339	29
32	9730,6128	9925,8681	9804,7447	10195,2552	28
33	9730,8108	9925,7875	9805,0233	10194,9766	27
34	9731,0087	9925,7068	9805,3018	10194,6981	26
35	9731,2064	9925,6261	9805,5803	10194,4196	25
36	9731,4040	9925,5453	9805,8586	10194,1413	24
37	9731,6015	9925,4645	9806,1369	10193,8630	23
38	9731,7988	9925,3836	9806,4151	10193,5848	22
39	9731,9960	9925,3027	9806,6933	10193,3066	21
40	9732,1931	9925,2218	9806,9714	10193,0285	20
41	9732,3901	9925,1407	9807,2494	10192,7506	19
42	9732,5870	9925,0596	9807,5273	10192,4726	18
43	9732,7837	9924,9785	9807,8051	10192,1948	17
44	9732,9803	9924,8973	9808,0829	10191,9170	16
45	9733,1767	9924,8161	9808,3606	10191,6393	15
46	9733,3731	9924,7348	9808,6382	10191,3617	14
47	9733,5693	9924,6535	9808,9158	10191,0842	13
48	9733,7654	9924,5721	9809,1932	10190,8067	12
49	9733,9613	9924,4906	9809,4707	10190,5293	11
50	9734,1572	9924,4092	9809,7480	10190,2519	10
51	9734,3529	9924,3276	9810,0252	10189,9747	9
52	9734,5485	9924,2460	9810,3024	10189,6975	8
53	9734,7440	9924,1644	9810,5796	10189,4204	7
54	9734,9393	9924,0827	9810,8566	10189,1433	6
55	9735,1345	9924,0009	9811,1336	20188,8663	5
56	9735,3296	9923,9191	9811,4105	10188,5894	4
57	9735,5246	9923,8372	9811,6873	10188,3126	3
58	9735,7194	9923,7553	9811,9640	10188,0359	2
59	9735,9141	9923,6734	9812,2407	10187,7592	1
60	9736,1087	9923,5914	9812,5173	10187,4826	0
		Sim. 57.		Tan. 57.	M

M	Sin. 33.		Tan. 33.		
0	9736,1087	9923,5914	9812,5173	10187,4826	60
1	9736,3032	9923,5093	9812,7939	10187,2061	59
2	9736,4975	9923,4272	9813,0703	10186,9296	58
3	9736,6918	9923,3450	9813,3467	10186,6532	57
4	9736,8859	9923,2628	9813,6231	10186,3769	56
5	9737,0798	9923,1805	9813,8993	10186,1006	55
6	9737,2737	9923,0982	9814,1755	10185,8244	54
7	9737,4674	9923,0158	9814,4516	10185,5483	53
8	9737,6610	9922,9334	9814,7276	10185,2723	52
9	9737,8545	9922,8509	9815,0036	10184,9963	51
10	9738,0479	9922,7683	9815,2795	10184,7204	50
11	9738,2411	9922,6858	9815,5553	10184,4446	49
12	9738,4342	9922,6031	9815,8311	10184,1688	48
13	9738,6272	9922,5204	9816,1068	10183,8931	47
14	9738,8201	9922,4377	9816,3824	10183,6175	46
15	9739,0128	9922,3549	9816,6579	10183,3420	45
16	9739,2055	9922,2720	9816,9334	10183,0665	44
17	9739,3980	9922,1891	9817,2088	10182,7911	43
18	9739,5904	9922,1062	9817,4842	10182,5158	42
19	9739,7826	9922,0231	9817,7594	10182,2405	41
20	9739,9748	9921,9401	9818,0346	10181,9653	40
21	9740,1668	9921,8570	9818,3098	10181,6902	39
22	9740,3587	9921,7738	9818,5848	10181,4151	38
23	9740,5504	9921,6906	9818,8598	10181,1401	37
24	9740,7421	9921,6073	9819,1347	10180,8652	36
25	9740,9336	9921,5240	9819,4096	10180,5903	35
26	9741,1250	9921,4406	9819,6844	10180,3155	34
27	9741,3163	9921,3572	9819,9591	10180,0408	33
28	9741,5075	9921,2737	9820,2338	10179,7662	32
29	9741,6985	9921,1901	9820,5084	10179,4916	31
30	9741,8895	9921,1066	9820,7829	10179,2171	30
		Sin. 56.		Tan. 56.	M

M	Sim. 33.		Tan. 33.		
30	9741,8895	9921,1066	9820,7829	10179,2171	30
31	9742,0803	9921,0229	9821,0573	10178,9426	29
32	9742,2710	9920,9392	9821,3317	10178,6682	28
33	9742,4615	9920,8555	9821,6060	10178,3939	27
34	9742,6520	9920,7717	9821,8803	10178,1197	26
35	9742,8423	9920,6878	9822,1544	10177,8455	25
36	9743,0325	9920,6039	9822,4286	10177,5714	24
37	9743,2226	9920,5199	9822,7026	10177,2973	23
38	9743,4125	9920,4359	9822,9766	10177,0233	22
39	9743,6024	9920,3519	9823,2505	10176,7494	21
40	9743,7921	9920,2677	9823,5243	10176,4756	20
41	9743,9817	9920,1836	9823,7981	10176,2018	19
42	9744,1712	9920,0993	9824,0718	10175,9281	18
43	9744,3606	9920,0151	9824,3455	10175,6545	17
44	9744,5498	9919,9307	9824,6190	10175,3809	16
45	9744,7389	9919,8463	9824,8925	10175,1074	15
46	9744,9279	9919,7619	9825,1660	10174,8339	14
47	9745,1168	9919,6774	9825,4394	10174,5605	13
48	9745,3056	9919,5929	9825,7127	10174,2872	12
49	9745,4942	9919,5083	9825,9859	10174,0140	11
50	9745,6828	9919,4236	9826,2591	10173,7408	10
51	9745,8712	9919,3389	9826,5322	10173,4677	9
52	9746,0595	9919,2542	9826,8053	10173,1946	8
53	9746,2477	9919,1693	9827,0783	10172,9216	7
54	9746,4357	9919,0845	9827,3512	10172,6487	6
55	9746,6237	9918,9996	9827,6241	10172,3758	5
56	9746,8115	9918,9146	9827,8969	10172,1030	4
57	9746,9992	9918,8296	9828,1696	10171,8303	3
58	9747,1868	9918,7445	9828,4423	10171,5576	2
59	9747,3743	9918,6594	9828,7149	10171,2850	1
60	9747,5616	9918,5742	9828,9874	10171,0125	0
		Sim. 56.		Tan. 56.	M

M	Sin. 34.		Tan. 34.	
0	9747,5616	9918,5742	9828,9874	10171,0125 60
1	9747,7489	9918,4889	9829,2599	10170,7400 59
2	9747,9360	9918,4036	9829,5323	10170,4676 58
3	9748,1230	9918,3183	9829,8046	10170,1953 57
4	9748,3099	9918,2329	9830,0769	10169,9230 56
5	9748,4966	9918,1474	9830,3491	10169,6508 55
6	9748,6833	9918,0619	9830,6213	10169,3786 54
7	9748,8698	9917,9764	9830,8934	10169,1065 53
8	9749,0562	9917,8908	9831,1654	10168,8345 52
9	9749,2425	9917,8051	9831,4374	10168,5626 51
10	9749,4287	9917,7194	9831,7093	10168,2906 50
11	9749,6148	9917,6336	9831,9811	10168,0188 49
12	9749,8007	9917,5478	9832,2529	10167,7470 48
13	9749,9865	9917,4619	9832,5246	10167,4753 47
14	9750,1723	9917,3760	9832,7963	10167,2037 46
15	9750,3579	9917,2900	9833,0678	10166,9321 45
16	9750,5433	9917,2039	9833,3394	10166,6605 44
17	9750,7287	9917,1178	9833,6108	10166,3891 43
18	9750,9140	9917,0317	9833,8822	10166,1177 42
19	9751,0991	9916,9455	9834,1536	10165,8463 41
20	9751,2841	9916,8592	9834,4249	10165,5751 40
21	9751,4690	9916,7729	9834,6961	10165,3039 39
22	9751,6538	9916,6865	9834,9672	10165,0327 38
23	9751,8385	9916,6001	9835,2383	10164,7616 37
24	9752,0230	9916,5137	9835,5094	10164,4906 36
25	9752,2075	9916,4271	9835,7803	10164,2196 35
26	9752,3918	9916,3405	9836,0513	10163,9487 34
27	9752,5760	9916,2539	9836,3221	10163,6778 33
28	9752,7601	9916,1672	9836,5929	10163,4070 32
29	9752,9441	9916,0805	9836,8636	10163,1363 31
30	9753,1280	9915,9937	9837,1343	10162,8656 30
	Sin. 55.		Tan. 55. M	



M	Sim. 34.		Tan. 34.	28. 112	M
30	9753, 1280	9915, 9937	9837, 1343	10162, 8656	30
31	9753, 3117	9915, 9068	9837, 4049	10162, 1950	29
32	9753, 4954	9915, 8199	9837, 6754	10162, 3245	28
33	9753, 6789	9915, 7330	9837, 9459	10162, 0540	27
34	9753, 8623	9915, 6460	9838, 2163	10161, 7836	26
35	9754, 0456	9915, 5589	9838, 4867	10161, 5132	25
36	9754, 2288	9915, 4718	9838, 7570	10161, 2429	24
37	9754, 4119	9915, 3846	9839, 0273	10160, 9726	23
38	9754, 5948	9915, 2973	9839, 2975	10160, 7025	22
39	9754, 7777	9915, 2101	9839, 5676	10160, 4323	21
40	9754, 9604	9915, 1227	9839, 8377	10160, 1623	20
41	9755, 1430	9915, 0353	9840, 1077	10159, 8922	19
42	9755, 3255	9914, 9479	9840, 3776	10159, 6223	18
43	9755, 5079	9914, 8604	9840, 6475	10159, 3524	17
44	9755, 6902	9914, 7728	9840, 9173	10159, 0826	16
45	9755, 8723	9914, 6852	9841, 1871	10158, 8128	15
46	9756, 0544	9914, 5975	9841, 4568	10158, 5431	14
47	9756, 2363	9914, 5098	9841, 7265	10158, 2734	13
48	9756, 4182	9914, 4220	9841, 9961	10158, 0038	12
49	9756, 5999	9914, 3342	9842, 2656	10157, 7343	11
50	9756, 7815	9914, 2463	9842, 5351	10157, 4648	10
51	9756, 9630	9914, 1584	9842, 8045	10157, 1954	9
52	9757, 1443	9914, 0704	9843, 0739	10156, 9260	8
53	9757, 3256	9913, 9823	9843, 3432	10156, 6567	7
54	9757, 5067	9913, 8942	9843, 6125	10156, 3875	6
55	9757, 6878	9913, 8061	9843, 8817	10156, 1183	5
56	9757, 8687	9913, 7179	9844, 1508	10155, 8491	4
57	9758, 0496	9913, 6296	9844, 4199	10155, 5801	3
58	9758, 2302	9913, 5413	9844, 6889	10155, 3110	2
59	9758, 4108	9913, 4529	9844, 9579	10155, 0421	1
60	9758, 5913	9913, 3645	9845, 2267	10154, 7732	0
		Sim. 55.		Tan. 55.	M

M	Sin. 35.		Tan. 35.		
0	9758,5913	9913,3645	9845,2267	10154,7732	60
1	9758,9716	9913,2760	9845,4956	10154,5043	59
2	9758,9519	9913,1875	9845,7644	10154,2355	58
3	9759,1320	9913,0989	9846,0331	10153,9668	57
4	9759,3120	9913,0102	9846,3018	10153,6981	56
5	9759,4920	9912,9215	9846,5704	10153,4295	55
6	9759,6718	9912,8327	9846,8390	10153,1609	54
7	9759,8515	9912,7439	9847,1075	10152,8924	53
8	9760,0310	9912,6551	9847,3759	10152,6240	52
9	9760,2105	9912,5661	9847,6444	10152,3556	51
10	9760,3899	9912,4772	9847,9127	10152,0872	50
11	9760,5691	9912,3884	9848,1810	10151,8189	49
12	9760,7483	9912,2990	9848,4492	10151,5507	48
13	9760,9273	9912,2099	9848,7174	10151,2825	47
14	9761,1062	9912,1207	9848,9855	10151,0144	46
15	9761,2850	9912,0314	9849,2536	10150,7463	45
16	9761,4637	9911,9421	9849,5216	10150,4783	44
17	9761,6423	9911,8528	9849,7895	10150,2104	43
18	9761,8208	9911,7633	9850,0574	10149,9425	42
19	9761,9992	9911,6739	9850,3253	10149,6747	41
20	9762,1774	9911,5843	9850,5931	10149,4069	40
21	9762,3556	9911,4948	9850,8608	10149,1391	39
22	9762,5336	9911,4051	9851,1285	10148,8714	38
23	9762,7116	9911,3154	9851,3961	10148,6038	37
24	9762,8894	9911,2257	9851,6637	10148,3362	36
25	9763,0671	9911,1359	9851,9312	10148,0687	35
26	9763,2447	9911,0460	9852,1987	10147,8013	34
27	9763,4222	9910,9561	9852,4661	10147,5339	33
28	9763,5995	9910,8661	9852,7334	10147,2665	32
29	9763,7768	9910,7761	9853,0007	10146,9992	31
30	9763,9540	9910,6860	9853,2680	10146,7320	30

Sin. 54.

Tan. 54. M

M	Sin. 35.		Tan. 35.		
30	9763,9540	9910,6860	9853,2680	10146,7320	30
31	9764,1311	9910,5959	9853,5352	10146,4648	29
32	9764,3080	9910,5057	9853,8033	10146,1976	28
33	9764,4848	9910,4154	9854,0694	10145,9305	27
34	9764,6616	9910,3251	9854,3364	10145,6635	26
35	9764,8382	9910,2347	9854,6034	10145,3965	25
36	9765,0147	9910,1443	9854,8703	10145,1296	24
37	9765,1911	9910,0539	9855,1372	10144,8627	23
38	9765,3674	9909,9633	9855,4040	10144,5959	22
39	9765,5436	9909,8727	9855,6708	10144,3291	21
40	9765,7197	9909,7821	9855,9375	10144,0624	20
41	9765,8956	9909,6914	9856,2042	10143,7957	19
42	9766,0715	9909,6007	9856,4708	10143,5291	18
43	9766,2473	9909,5099	9856,7374	10143,2626	17
44	9766,4229	9909,4190	9857,0039	10142,9960	16
45	9766,5984	9909,3281	9857,2703	10142,7296	15
46	9766,7739	9909,2371	9857,5367	10142,4632	14
47	9766,9492	9909,1461	9857,8031	10142,1968	13
48	9767,1244	9909,0550	9858,0694	10141,9305	12
49	9767,2995	9908,9638	9858,3356	10141,6643	11
50	9767,4745	9908,8726	9858,6018	10141,3981	10
51	9767,6494	9908,7814	9858,8680	10141,1319	9
52	9767,8242	9908,6901	9859,1341	10140,8658	8
53	9767,9989	9908,5987	9859,4001	10140,5998	7
54	9768,1734	9908,5073	9859,6661	10140,3338	6
55	9768,3479	9908,4158	9859,9321	10140,0679	5
56	9768,5223	9908,3243	9860,1979	10139,8020	4
57	9768,6965	9908,2327	9860,4638	10139,5361	3
58	9768,8707	9908,1411	9860,7296	10139,2703	2
59	9769,0447	9908,0494	9860,9953	10139,0046	1
60	9769,2186	9907,9576	9861,2610	10138,7389	0
	Sin. 54.			Tan. 54.	M

M	Sin. 36.	Tan. 36.	Sin. 36.	Tan. 36.
0	9769,2186	9907,9576	9861,2610	10138,7389
1	9769,3925	9907,8658	9861,5266	10138,4833
2	9769,5662	9907,7739	9861,7922	10138,2077
3	9769,7398	9907,6810	9862,0578	10137,9421
4	9769,9133	9907,5900	9862,3232	10137,6767
5	9770,0867	9907,4980	9862,5887	10137,4112
6	9770,2600	9907,4059	9862,8541	10137,1458
7	9770,4332	9907,3137	9863,1194	10136,8805
8	9770,6063	9907,2215	9863,3847	10136,6152
9	9770,7793	9907,1293	9863,6500	10136,3500
10	9770,9521	9907,0369	9863,9152	10136,0848
11	9771,1249	9906,9446	9864,1803	10135,8196
12	9771,2976	9906,8521	9864,4454	10135,5545
13	9771,4701	9906,7596	9864,7104	10135,2895
14	9771,6426	9906,6671	9864,9754	10135,0245
15	9771,8149	9906,5745	9865,2404	10134,7595
16	9771,9872	9906,4818	9865,5053	10134,4946
17	9772,1593	9906,3891	9865,7702	10134,2298
18	9772,3313	9906,2964	9866,0349	10133,9650
19	9772,5033	9906,2035	9866,2997	10133,7002
20	9772,6751	9906,1106	9866,5644	10133,4355
21	9772,8468	9906,0177	9866,8291	10133,1709
22	9773,0184	9905,9247	9867,0937	10132,9062
23	9773,1899	9905,8317	9867,3582	10132,6417
24	9773,3613	9905,7385	9867,6227	10132,3772
25	9773,5326	9905,6454	9867,8872	10132,1127
26	9773,7038	9905,5521	9868,1516	10131,8483
27	9773,8749	9905,4589	9868,4160	10131,5839
28	9774,0459	9905,3655	9868,6803	10131,3196
29	9774,2168	9905,2721	9868,9446	10131,0553
30	9774,3876	9905,1787	9869,2088	10130,7911
	Sin. 53.		Tan. 53.	M



M	Sin. 36.		Tan. 36.		M
30	9774,3876	9903,1787	9869,1088	10130,7911	30
31	9774,5582	9903,0852	9869,4730	10130,5269	29
32	9774,7288	9904,9916	9869,7372	10130,2627	28
33	9774,8993	9904,8980	9870,0013	10129,9987	27
34	9775,0696	9904,8043	9870,2653	10129,7346	26
35	9775,2399	9904,7106	9870,5293	10129,4706	25
36	9775,4101	9904,6168	9870,7932	10129,2067	24
37	9775,5801	9904,5229	9871,0572	10128,9428	23
38	9775,7501	9904,4290	9871,3210	10128,6789	22
39	9775,9199	9904,3351	9871,5848	10128,4151	21
40	9776,0896	9904,2410	9871,8486	10128,1513	20
41	9776,2593	9904,1470	9872,1123	10127,8876	19
42	9776,4288	9904,0528	9872,3759	10127,6240	18
43	9776,5983	9903,9586	9872,6396	10127,3603	17
44	9776,7676	9903,8644	9872,9032	10127,0968	16
45	9776,9368	9903,7701	9873,1667	10126,8332	15
46	9777,1059	9903,6757	9873,4302	10126,5697	14
47	9777,2750	9903,5813	9873,6937	10126,3063	13
48	9777,4439	9903,4868	9873,9571	10126,0429	12
49	9777,6127	9903,3923	9874,2204	10125,7795	11
50	9777,7814	9903,2977	9874,4837	10125,5162	10
51	9777,9500	9903,2030	9874,7470	10125,2529	9
52	9778,1186	9903,1083	9875,0102	10124,9897	8
53	9778,2870	9903,0135	9875,2734	10124,7265	7
54	9778,4553	9902,9187	9875,5365	10124,4634	6
55	9778,6235	9902,8238	9875,7996	10124,2003	5
56	9778,7916	9902,7289	9876,0626	10123,9373	4
57	9778,9596	9902,6339	9876,3256	10123,6743	3
58	9779,1275	9902,5389	9876,5886	10123,4113	2
59	9779,2953	9902,4437	9876,8515	10123,1484	1
60	9779,4630	9902,3486	9877,1144	10122,8855	0
		Sin. 53.		Tan. 53.	M

M	Sin. 37.		Tan. 37.		
0	9779,4630	9902,3486	9877,1144	10122,8855	60
1	9779,6306	9902,2533	9877,3772	10122,6227	59
2	9779,7981	9902,1581	9877,6400	10122,3599	58
3	9779,9655	9902,0627	9877,9027	10122,0972	57
4	9780,1328	9901,9673	9878,1654	10121,8345	56
5	9780,3000	9901,8719	9878,4280	10121,5719	55
6	9780,4670	9901,7764	9878,6907	10121,3093	54
7	9780,6342	9901,6808	9878,9532	10121,0467	53
8	9780,8009	9901,5852	9879,2157	10120,7842	52
9	9780,9677	9901,4895	9879,4782	10120,5217	51
10	9781,1344	9901,3937	9879,7406	10120,2593	50
11	9781,3010	9901,2979	9880,0030	10119,9969	49
12	9781,4675	9901,2021	9880,2654	10119,7345	48
13	9781,6339	9901,1061	9880,5277	10119,4722	47
14	9781,8001	9901,0102	9880,7899	10119,2100	46
15	9781,9663	9900,9141	9881,0522	10118,9478	45
16	9782,1324	9900,8180	9881,3143	10118,6856	44
17	9782,2984	9900,7219	9881,5765	10118,4234	43
18	9782,4643	9900,6257	9881,8386	10118,1613	42
19	9782,6301	9900,5294	9882,1006	10117,8993	41
20	9782,7957	9900,4331	9882,3626	10117,6373	40
21	9782,9613	9900,3367	9882,6246	10117,3753	39
22	9783,1268	9900,2402	9882,8865	10117,1134	38
23	9783,2922	9900,1437	9883,1484	10116,8515	37
24	9783,4575	9900,0472	9883,4103	10116,5897	36
25	9783,6227	9899,9506	9883,6721	10116,3279	35
26	9783,7877	9899,8539	9883,9338	10116,0661	34
27	9783,9527	9899,7572	9884,1955	10115,8044	33
28	9784,1176	9899,6604	9884,4572	10115,5427	32
29	9784,2824	9899,5635	9884,7188	10115,2811	31
30	9784,4471	9899,4666	9884,9804	10115,0195	30
		Sin. 52.		Tan. 52.	M

M	Sin. 37.		Tan. 37.		
30	9784,4471	9899,4666	9884,9804	10115,0195	30
31	9784,6117	9899,3696	9885,2420	10114,7579	29
32	9784,7762	9899,2726	9885,5035	10114,4964	28
33	9784,9405	9899,1755	9885,7650	10114,2349	27
34	9785,1048	9899,0784	9886,0264	10113,9735	26
35	9785,2690	9898,9812	9886,2878	10113,7121	25
36	9785,4331	9898,8839	9886,5492	10113,4508	24
37	9785,5971	9898,7866	9886,8105	10113,1894	23
38	9785,7610	9898,6892	9887,0717	10112,9282	22
39	9785,9248	9898,5918	9887,3330	10112,6669	21
40	9786,0885	9898,4943	9887,5942	10112,4057	20
41	9786,2521	9898,3968	9887,8553	10112,1446	19
42	9786,4156	9898,2992	9888,1164	10111,8835	18
43	9786,5790	9898,2015	9888,3775	10111,6224	17
44	9786,7423	9898,1038	9888,6385	10111,3614	16
45	9786,9055	9898,0060	9888,8995	10111,1004	15
46	9787,0687	9897,9081	9889,1605	10110,8394	14
47	9787,2317	9897,8102	9889,4214	10110,5785	13
48	9787,3946	9897,7123	9889,6823	10110,3176	12
49	9787,5574	9897,6142	9889,9431	10110,0568	11
50	9787,7201	9897,5162	9890,2039	10109,7950	10
51	9787,8827	9897,4180	9890,4647	10109,5352	9
52	9788,0453	9897,3198	9890,7254	10109,2745	8
53	9788,2077	9897,2216	9890,9861	10109,0138	7
54	9788,3700	9897,1232	9891,2467	10108,7532	6
55	9788,5322	9897,0249	9891,5073	10108,4926	5
56	9788,6944	9896,9264	9891,7679	10108,2320	4
57	9788,8564	9896,8279	9892,0284	10107,9715	3
58	9789,0184	9896,7294	9892,2889	10107,7110	2
59	9789,1802	9896,6308	9892,5494	10107,4505	1
60	9789,3419	9896,5321	9892,8098	10107,1901	0
	Sin. 52.		Tan. 52.		M

M	Sim. 38.		Tan. 38.		
0	9789,3419	9896,5321	9892,8098	10107,1901	60
1	9789,5036	9896,4334	9893,0702	10106,9297	59
2	9789,6651	9896,3346	9893,3305	10105,6694	58
3	9789,8266	9896,2357	9893,5908	10106,4091	57
4	9789,9880	9896,1368	9893,8511	10106,1488	56
5	9790,1492	9896,0379	9894,1113	10105,8886	55
6	9790,3104	9895,9388	9894,3715	10105,6284	54
7	9790,4714	9895,8398	9894,6317	10105,3683	53
8	9790,6324	9895,7406	9894,8918	10105,1081	52
9	9790,7933	9895,6414	9895,1519	10104,8481	51
10	9790,9541	9895,5421	9895,4119	10104,5880	50
11	9791,1148	9895,4428	9895,6719	10104,3280	49
12	9791,2753	9895,3434	9895,9319	10104,0680	48
13	9791,4358	9895,2440	9896,1918	10103,8081	47
14	9791,5962	9895,1445	9896,4517	10103,5482	46
15	9791,7565	9895,0449	9896,7116	10103,2884	45
16	9791,9167	9894,9453	9896,9714	10103,0285	44
17	9792,0768	9894,8456	9897,2312	10102,7687	43
18	9792,2368	9894,7459	9897,4909	10102,5090	42
19	9792,3968	9894,6461	9897,7507	10102,2493	41
20	9792,5566	9894,5462	9898,0103	10101,9896	40
21	9792,7163	9894,4463	9898,2700	10101,7300	39
22	9792,8759	9894,3463	9898,5296	10101,4704	38
23	9793,0355	9894,2463	9898,7891	10101,2108	37
24	9793,1949	9894,1462	9899,0487	10100,9512	36
25	9793,3542	9894,0460	9899,3082	10100,6917	35
26	9793,5135	9893,9458	9899,5677	10100,4323	34
27	9793,6726	9893,8455	9899,8271	10100,1728	33
28	9793,8317	9893,7452	9900,0865	10099,9134	32
29	9793,9907	9893,6448	9900,3458	10099,6541	31
30	9794,1495	9893,5443	9900,6052	10099,3948	30
		Sim. 51.		Tan. 51.	M



M	Sin. 38.		Tan. 38.		
30	9794,1495	9893,5443	9900,6052	10099,3948	30
31	9794,3083	9893,4438	9900,8644	10099,1355	29
32	9794,4670	9893,3432	9901,1237	10098,8762	28
33	9794,6256	9893,2426	9901,3829	10098,6170	27
34	9794,7840	9893,1419	9901,6421	10098,3578	26
35	9794,9424	9893,0411	9901,9013	10098,0987	25
36	9795,1007	9892,9403	9902,1604	10097,8395	24
37	9795,2590	9892,8394	9902,4195	10097,5804	23
38	9795,4171	9892,7385	9902,6785	10097,3214	22
39	9795,5751	9892,6375	9902,9375	10097,0624	21
40	9795,7330	9892,5364	9903,1965	10096,8034	20
41	9795,8908	9892,4353	9903,4555	10096,5445	19
42	9796,0486	9892,3341	9903,7144	10096,2855	18
43	9796,2062	9892,2329	9903,9733	10096,0267	17
44	9796,3637	9892,1316	9904,2321	10095,7678	16
45	9796,5212	9892,0302	9904,4909	10095,5090	15
46	9796,6785	9891,9288	9904,7497	10095,2502	14
47	9796,8358	9891,8273	9905,0084	10094,9915	13
48	9796,9930	9891,7258	9905,2672	10094,7328	12
49	9797,1501	9891,6242	9905,5258	10094,4741	11
50	9797,3070	9891,5225	9905,7845	10094,2154	10
51	9797,4639	9891,4208	9906,0431	10093,9568	9
52	9797,6207	9891,3190	9906,3017	10093,6982	8
53	9797,7774	9891,2172	9906,5602	10093,4397	7
54	9797,9341	9891,1153	9906,8188	10093,1812	6
55	9798,0906	9891,0133	9907,0772	10092,9227	5
56	9798,2470	9890,9113	9907,3357	10092,6642	4
57	9798,4033	9890,8092	9907,5941	10092,4058	3
58	9798,5596	9890,7070	9907,8525	10092,1474	2
59	9798,7157	9890,6048	9908,1109	10091,8891	1
60	9798,8718	9890,5026	9908,3692	10091,6307	0
		Sin. 51.		Tan. 51.	M

M	Sin. 39.		Tan. 39.		
0	9798,8718	9890,5026	9908,3692	10091,6307	60
1	9799,0277	9890,4002	9908,6275	10091,3724	59
2	9799,1836	9890,2978	9908,8857	10091,1142	58
3	9799,3394	9890,1954	9909,1440	10090,8560	57
4	9799,4950	9890,0929	9909,4022	10090,5978	56
5	9799,6506	9889,9903	9909,6603	10090,3396	55
6	9799,8061	9889,8877	9909,9184	10090,0815	54
7	9799,9615	9889,7850	9910,1765	10089,8234	53
8	9800,1168	9889,6822	9910,4346	10089,5653	52
9	9800,2721	9889,5794	9910,6927	10089,3073	51
10	9800,4272	9889,4765	9910,9507	10089,0493	50
11	9800,5822	9889,3736	9911,2086	10088,7913	49
12	9800,7372	9889,2706	9911,4666	10088,5333	48
13	9800,8920	9889,1675	9911,7245	10088,2754	47
14	9801,0468	9889,0644	9911,9824	10088,0175	46
15	9801,2015	9888,9612	9912,2402	10087,7597	45
16	9801,3560	9888,8579	9912,4981	10087,5019	44
17	9801,5105	9888,7546	9912,7558	10087,2441	43
18	9801,6649	9888,6513	9913,0136	10086,9863	42
19	9801,8192	9888,5478	9913,2714	10086,7286	41
20	9801,9734	9888,4443	9913,5291	10086,4709	40
21	9802,1275	9888,3408	9913,7867	10086,2132	39
22	9802,2816	9888,2372	9914,0444	10085,9559	38
23	9802,4355	9888,1335	9914,3020	10085,6980	37
24	9802,5893	9888,0297	9914,5596	10085,4404	36
25	9802,7431	9887,9259	9914,8171	10085,1828	35
26	9802,8967	9887,8221	9915,0746	10084,9253	34
27	9803,0503	9887,7182	9915,3321	10084,6678	33
28	9803,2038	9887,6142	9915,5896	10084,4103	32
29	9803,3572	9887,5101	9915,8470	10084,1529	31
30	9803,5105	9887,4060	9916,1044	10083,8955	30
	Sin. 50.			Tan. 50.	M

M	Sin. 39.		Tan. 39.		
30	9803,5105	9887,4060	9916,1044	10083,8995	30
31	9803,6637	9887,3018	9916,3618	10083,6381	29
32	9803,8168	9887,1976	9916,6192	10083,3808	28
33	9803,9698	9887,0933	9916,8765	10083,1234	27
34	9804,1228	9886,9890	9917,1338	10082,8661	26
35	9804,2756	9886,8845	9917,3910	10082,6089	25
36	9804,4284	9886,7801	9917,6483	10082,3517	24
37	9804,5810	9886,6755	9917,9055	10082,0944	23
38	9804,7336	9886,5709	9918,1626	10081,8373	22
39	9804,8861	9886,4663	9918,4198	10081,5801	21
40	9805,0385	9886,3615	9918,6769	10081,3230	20
41	9805,1908	9886,2567	9918,9340	10081,0659	19
42	9805,3430	9886,1519	9919,1911	10080,8089	18
43	9805,4951	9886,0470	9919,4481	10080,5518	17
44	9805,6471	9885,9420	9919,7051	10080,2948	16
45	9805,7991	9885,8370	9919,9621	10080,0378	15
46	9805,9509	9885,7319	9920,2190	10079,7809	14
47	9806,1027	9885,6267	9920,4760	10079,5240	13
48	9806,2544	9885,5215	9920,7328	10079,2671	12
49	9806,4060	9885,4162	9920,9897	10079,0102	11
50	9806,5575	9885,3108	9921,2466	10078,7533	10
51	9806,7088	9885,2054	9921,5034	10078,4965	9
52	9806,8602	9885,1000	9921,7602	10078,2397	8
53	9807,0114	9884,9944	9922,0169	10077,9830	7
54	9807,1625	9884,8888	9922,2737	10077,7263	6
55	9807,3136	9884,7832	9922,5304	10077,4695	5
56	9807,4645	9884,6774	9922,7870	10077,2129	4
57	9807,6154	9884,5717	9923,0437	10076,9562	3
58	9807,7662	9884,4658	9923,3003	10076,6996	2
59	9807,9169	9884,3599	9923,5569	10076,4430	1
60	9808,0675	9884,2539	9923,8135	10076,1864	0
		Sin. 50.		Tan. 50.	M

M	Sin. 40.		Tan. 40.		
0	9808,0675	9884,2539	9923,8135	10076,1864	60
1	9808,2180	9884,1479	9924,0700	10075,9299	59
2	9808,3684	9884,0418	9924,3266	10075,6734	58
3	9808,5187	9883,9356	9924,5831	10075,4169	57
4	9808,6690	9883,8294	9924,8395	10075,1604	56
5	9808,8191	9883,7231	9925,0960	10074,9039	55
6	9808,9692	9883,6168	9925,3524	10074,6475	54
7	9809,1192	9883,5104	9925,6088	10074,3911	53
8	9809,2691	9883,4039	9925,8651	10074,1348	52
9	9809,4189	9883,2973	9926,1215	10073,8784	51
10	9809,5686	9883,1907	9926,3778	10073,6221	50
11	9809,7182	9883,0841	9926,6341	10073,3658	49
12	9809,8677	9882,9774	9926,8903	10073,1096	48
13	9810,0172	9882,8706	9927,1466	10072,8533	47
14	9810,1665	9882,7637	9927,4028	10072,5971	46
15	9810,3158	9882,6568	9927,6590	10072,3409	45
16	9810,4650	9882,5498	9927,9152	10072,0848	44
17	9810,6141	9882,4428	9928,1713	10071,8286	43
18	9810,7631	9882,3357	9928,4274	10071,5725	42
19	9810,9120	9882,2285	9928,6835	10071,3164	41
20	9811,0609	9882,1213	9928,9396	10071,0604	40
21	9811,2096	9882,0140	9929,1956	10070,8043	39
22	9811,3583	9881,9066	9929,4516	10070,5483	38
23	9811,5068	9881,7992	9929,7076	10070,2923	37
24	9811,6553	9881,6917	9929,9636	10070,0364	36
25	9811,8037	9881,5842	9930,2195	10069,7804	35
26	9811,9520	9881,4766	9930,4754	10069,5245	34
27	9812,1002	9881,3689	9930,7313	10069,2686	33
28	9812,2484	9881,2611	9930,9872	10069,0127	32
29	9812,3964	9881,1533	9931,2430	10068,7569	31
30	9812,5444	9881,0455	9931,4989	10068,5011	30
	Sin. 49.			Tan. 49.	M



M	Sim. 40.		Tan. 40.		
30	9812,5444	9881,0455	9931,4989	10068,5011	30
31	9812,6922	9880,9375	9931,7547	10068,2452	29
32	9812,8400	9880,8295	9932,0104	10067,9895	28
33	9812,9877	9880,7215	9932,2662	10067,7337	27
34	9813,1353	9880,6134	9932,5219	10067,4780	26
35	9813,2829	9880,5052	9932,7776	10067,2223	25
36	9813,4303	9880,3969	9933,0333	10066,9666	24
37	9813,5776	9880,2886	9933,2890	10066,7109	23
38	9813,7249	9880,1803	9933,5446	10066,4553	22
39	9813,8721	9880,0718	9933,8002	10066,1997	21
40	9814,0192	9879,9633	9934,0558	10065,9441	20
41	9814,1662	9879,8547	9934,3114	10065,6885	19
42	9814,3131	9879,7461	9934,5669	10065,4330	18
43	9814,4599	9879,6374	9934,8225	10065,1775	17
44	9814,6067	9879,5287	9935,0780	10064,9220	16
45	9814,7533	9879,4199	9935,3334	10064,6665	15
46	9814,8999	9879,3110	9935,5889	10064,4110	14
47	9815,0464	9879,2020	9935,8443	10064,1556	13
48	9815,1928	9879,0930	9936,0997	10063,9002	12
49	9815,3391	9878,9839	9936,3552	10063,6448	11
50	9815,4853	9878,8748	9936,6105	10063,3894	10
51	9815,6315	9878,7656	9936,8659	10063,1341	9
52	9815,7775	9878,6563	9937,1212	10062,8787	8
53	9815,9235	9878,5470	9937,3765	10062,6234	7
54	9816,0694	9878,4376	9937,6318	10062,3682	6
55	9816,2152	9878,3281	9937,8870	10062,1129	5
56	9816,3609	9878,2186	9938,1423	10061,8576	4
57	9816,5065	9878,1090	9938,3975	10061,6024	3
58	9816,6521	9877,9993	9938,6527	10061,3472	2
59	9816,7975	9877,8896	9938,9079	10061,0921	1
60	9816,9429	9877,7798	9939,1630	10060,8369	0
		Sim. 49.		Tan. 49.	M

M	Sin. 41.		Tan. 41.		
0	9816,9429	9877,7798	9939,1630	10060,8369	60
1	9817,0882	9877,6700	9939,4182	10060,5818	59
2	9817,2334	9877,5601	9939,6733	10060,3266	58
3	9817,3785	9877,4501	9939,9284	10060,0716	57
4	9817,5235	9877,3400	9940,1834	10059,8165	56
5	9817,6684	9877,2299	9940,4385	10059,5614	55
6	9817,8133	9877,1198	9940,6935	10059,3064	54
7	9817,9581	9877,0095	9940,9485	10059,0514	53
8	9818,1028	9876,8992	9941,2035	10058,7964	52
9	9818,2474	9876,7888	9941,4585	10058,5414	51
10	9818,3919	9876,6784	9941,7134	10058,2865	50
11	9818,5363	9876,5680	9941,9684	10058,0316	49
12	9818,6807	9876,4574	9942,2233	10057,7766	48
13	9818,8249	9876,3467	9942,4782	10057,5217	47
14	9818,9691	9876,2360	9942,7331	10057,2669	46
15	9819,1132	9876,1253	9942,9879	10057,0120	45
16	9819,2572	9876,0145	9943,2427	10056,7572	44
17	9819,4012	9875,9036	9943,4976	10056,5024	43
18	9819,5450	9875,7926	9943,7523	10056,2476	42
19	9819,6888	9875,6816	9944,0071	10055,9928	41
20	9819,8324	9875,5705	9944,2619	10055,7380	40
21	9819,9760	9875,4594	9944,5166	10055,4833	39
22	9820,1195	9875,3481	9944,7713	10055,2286	38
23	9820,2629	9875,2369	9945,0260	10054,9739	37
24	9820,4063	9875,1255	9945,2807	10054,7192	36
25	9820,5495	9875,0141	9945,5354	10054,4645	35
26	9820,6927	9874,9027	9945,7900	10054,2099	34
27	9820,8358	9874,7911	9946,0446	10053,9553	33
28	9820,9788	9874,6795	9946,2992	10053,7007	32
29	9821,1217	9874,5678	9946,5538	10053,4461	31
30	9821,2645	9874,4561	9946,8084	10053,1915	30
	Sin. 48.		Tan. 48.		M

M	Sin. 41.		Tan. 41.		
30	9821,2645	9874,4561	9946,8084	10053,1915	30
31	9821,4073	9874,3443	9947,0629	10052,9370	29
32	9821,5500	9874,2324	9947,3175	10052,6824	28
33	9821,6925	9874,1205	9947,5720	10052,4279	27
34	9821,8350	9874,0085	9947,8265	10052,1734	26
35	9821,9774	9873,8964	9948,0810	10051,9190	25
36	9822,1198	9873,7843	9948,3354	10051,6645	24
37	9822,2620	9873,6721	9948,5899	10051,4101	23
38	9822,4042	9873,5599	9948,8443	10051,1556	22
39	9822,5463	9873,4475	9949,0987	10050,9012	21
40	9822,6883	9873,3351	9949,3531	10050,6468	20
41	9822,8302	9873,2227	9949,6075	10050,3925	19
42	9822,9720	9873,1102	9949,8618	10050,1381	18
43	9823,1138	9872,9976	9950,1162	10049,8837	17
44	9823,2554	9872,8849	9950,3705	10049,6294	16
45	9823,3970	9872,7722	9950,6248	10049,3751	15
46	9823,5385	9872,6594	9950,8791	10049,1208	14
47	9823,6799	9872,5465	9951,1334	10048,8666	13
48	9823,8213	9872,4336	9951,3870	10048,6123	12
49	9823,9625	9872,3206	9951,6408	10048,3581	11
50	9824,1037	9872,2075	9951,8961	10048,1039	10
51	9824,2448	9872,0945	9952,1503	10047,8496	9
52	9824,3858	9871,9813	9952,4041	10047,5955	8
53	9824,5267	9871,8680	9952,6585	10047,3413	7
54	9824,6675	9871,7547	9952,9128	10047,0871	6
55	9824,8083	9871,6413	9953,1669	10046,8330	5
56	9824,9490	9871,5279	9953,4211	10046,5789	4
57	9825,0896	9871,4144	9953,6752	10046,3247	3
58	9825,2301	9871,3008	9953,9293	10046,0707	2
59	9825,3705	9871,1871	9954,1833	10045,8166	1
60	9825,5109	9871,0734	9954,4374	10045,5625	0
		Sin. 48.		Tan. 48.	M

M	Sin. 42.		Tan. 42.		
0	9825,5109	9871,0734	9954,4374	10045,5625	60
1	9825,6511	9870,9596	9954,6914	10045,3085	59
2	9825,7913	9870,8458	9954,9455	10045,0545	58
3	9825,9314	9870,7319	9955,1995	10044,8004	57
4	9826,0714	9870,6179	9955,4535	10044,5464	56
5	9826,2114	9870,5038	9955,7075	10044,2924	55
6	9826,3512	9870,3897	9955,9615	10044,0385	54
7	9826,4910	9870,2755	9956,2154	10043,7845	53
8	9826,6307	9870,1613	9956,4693	10043,5306	52
9	9826,7703	9870,0470	9956,7233	10043,2766	51
10	9826,9098	9869,9326	9956,9772	10043,0227	50
11	9827,0493	9869,8181	9957,2311	10042,7688	49
12	9827,1886	9869,7036	9957,4850	10042,5150	48
13	9827,3279	9869,5890	9957,7388	10042,2611	47
14	9827,4671	9869,4744	9957,9927	10042,0072	46
15	9827,6062	9869,3597	9958,2465	10041,7534	45
16	9827,7453	9869,2449	9958,5003	10041,4996	44
17	9827,8842	9869,1300	9958,7541	10041,2458	43
18	9828,0231	9869,0151	9959,0079	10040,9920	42
19	9828,1619	9868,9001	9959,2617	10040,7382	41
20	9828,3006	9868,7851	9959,5155	10040,4844	40
21	9828,4392	9868,6700	9959,7692	10040,2307	39
22	9828,5778	9868,5548	9960,0230	10039,9769	38
23	9828,7163	9868,4395	9960,2767	10039,7232	37
24	9828,8547	9868,3242	9960,5304	10039,4695	36
25	9828,9930	9868,2088	9960,7841	10039,2158	35
26	9829,1312	9868,0934	9961,0378	10038,9621	34
27	9829,2693	9867,9778	9961,2915	10038,7084	33
28	9829,4074	9867,8622	9961,5451	10038,4548	32
29	9829,5454	9867,7466	9961,7988	10038,2011	31
30	9829,6833	9867,6308	9962,0524	10037,9475	30
		Sin. 74.		Tan. 47.	M



M	Sim. 42.		Tan. 42.		
30	9829,6833	9867,6308	9962,0524	10037,9475	30
31	9829,8211	9867,5150	9962,3061	10037,6939	29
32	9829,9589	9867,3992	9962,5597	10037,4403	28
33	9830,0965	9867,2833	9962,8133	10037,1867	27
34	9830,2341	9867,1673	9963,0668	10036,9331	26
35	9830,3716	9867,0512	9963,3204	10036,6795	25
36	9830,5091	9866,9351	9963,5740	10036,4260	24
37	9830,6464	9866,8189	9963,8275	10036,1724	23
38	9830,7837	9866,7026	9964,0810	10035,9189	22
39	9830,9208	9866,5863	9964,3346	10035,6654	21
40	9831,0579	9866,4698	9964,5881	10035,4119	20
41	9831,1950	9866,3534	9964,8416	10035,1584	19
42	9831,3319	9866,2368	9965,0950	10034,9049	18
43	9831,4688	9866,1202	9965,3485	10034,6514	17
44	9831,6056	9866,0036	9965,6020	10034,3979	16
45	9831,7423	9865,8868	9965,8554	10034,1445	15
46	9831,8789	9865,7700	9966,1089	10033,8910	14
47	9832,0154	9865,6531	9966,3623	10033,6376	13
48	9832,1519	9865,5362	9966,6157	10033,3842	12
49	9832,2883	9865,4191	9966,8691	10033,1308	11
50	9832,4246	9865,3021	9967,1225	10032,8774	10
51	9832,5608	9865,1849	9967,3759	10032,6240	9
52	9832,6970	9865,0677	9967,6293	10032,3707	8
53	9832,8330	9864,9504	9967,8826	10032,1173	7
54	9832,9690	9864,8330	9968,1360	10031,8640	6
55	9833,1049	9864,7156	9968,3893	10031,6106	5
56	9833,2408	9864,5981	9968,6426	10031,3573	4
57	9833,3765	9864,4805	9968,8959	10031,1040	3
58	9833,5122	9864,3629	9969,1493	10030,8507	2
59	9833,6478	9864,2452	9969,4026	10030,5974	1
60	9833,7833	9864,1274	9969,6558	10030,3441	0
		Sim. 47.		Tan. 47.	M

M	Sin. 43.		Tan. 43.		
0	9833,7833	9864,1274	9969,6558	10030,3441	60
1	9833,9187	9864,0096	9969,9091	10030,0908	59
2	9834,0541	9863,8917	9970,1624	10029,8376	58
3	9834,1894	9863,7737	9970,4156	10029,5843	57
4	9834,3246	9863,6556	9970,6689	10029,3310	56
5	9834,4597	9863,5375	9970,9221	10029,0778	55
6	9834,5947	9863,4194	9971,1753	10028,8246	54
7	9834,7297	9863,3011	9971,4285	10028,5714	53
8	9834,8646	9863,1828	9971,6817	10028,3182	52
9	9834,9994	9863,0644	9971,9349	10028,0650	51
10	9835,1341	9862,9459	9972,1881	10027,8118	50
11	9835,2687	9862,8274	9972,4413	10027,5586	49
12	9835,4033	9862,7088	9972,6945	10027,3055	48
13	9835,5378	9862,5901	9972,9476	10027,0523	47
14	9835,6722	9862,4714	9973,2008	10026,7991	46
15	9835,8065	9862,3526	9973,4539	10026,5460	45
16	9835,9408	9862,2337	9973,7071	10026,2929	44
17	9836,0750	9862,1148	9973,9602	10026,0397	43
18	9836,2091	9861,9958	9974,2133	10025,7866	42
19	9836,3431	9861,8767	9974,4664	10025,5335	41
20	9836,4770	9861,7575	9974,7195	10025,2804	40
21	9836,6109	9861,6383	9974,9726	10025,0274	39
22	9836,7447	9861,5190	9975,2256	10024,7743	38
23	9836,8784	9861,3996	9975,4787	10024,5212	37
24	9837,0120	9861,2802	9975,7318	10024,2682	36
25	9837,1456	9861,1607	9975,9848	10024,0151	35
26	9837,2790	9861,0411	9976,2379	10023,7621	34
27	9837,4124	9860,9215	9976,4909	10023,5090	33
28	9837,5457	9860,8018	9976,7439	10023,2560	32
29	9837,6790	9860,6820	9976,9969	10023,0030	31
30	9837,8122	9860,5622	9977,2500	10022,7500	30
		Sin. 46.		Tan. 46.	M

M	Sin. 43.		Tan. 43.		
30	9837,8122	9860,5622	9977,2500	10022,7500	30
31	9837,9453	9860,4423	9977,5030	10022,4970	29
32	9838,0783	9860,3223	9977,7560	10022,2440	28
33	9838,2112	9860,2022	9978,0090	10021,9910	27
34	9838,3441	9860,0821	9978,2619	10021,7380	26
35	9838,4768	9859,9619	9978,5149	10021,4850	25
36	9838,6095	9859,8416	9978,7679	10021,2320	24
37	9838,7421	9859,7213	9979,0208	10020,9791	23
38	9838,8747	9859,6009	9979,2738	10020,7261	22
39	9839,0072	9859,4804	9979,5267	10020,4732	21
40	9839,1396	9859,3598	9979,7797	10020,2202	20
41	9839,2719	9859,2392	9980,0326	10019,9673	19
42	9839,4041	9859,1185	9980,2855	10019,7144	18
43	9839,5363	9858,9978	9980,5385	10019,4615	17
44	9839,6683	9858,8769	9980,7914	10019,2086	16
45	9839,8003	9858,7560	9981,0443	10018,9557	15
46	9839,9323	9858,6351	9981,2972	10018,7027	14
47	9840,0641	9858,5140	9981,5501	10018,4498	13
48	9840,1959	9858,3929	9981,8030	10018,1970	12
49	9840,3276	9858,2717	9982,0558	10017,9441	11
50	9840,4592	9858,1505	9982,3087	10017,6912	10
51	9840,5908	9858,0291	9982,5616	10017,4383	9
52	9840,7222	9857,9077	9982,8145	10017,1855	8
53	9840,8536	9857,7863	9983,0673	10016,9326	7
54	9840,9849	9857,6648	9983,3202	10016,6798	6
55	9841,1162	9857,5432	9983,5730	10016,4269	5
56	9841,2473	9857,4215	9983,8258	10016,1741	4
57	9841,3784	9857,2997	9984,0787	10015,9212	3
58	9841,5094	9857,1779	9984,3315	10015,6684	2
59	9841,6404	9857,0560	9984,5843	10015,4156	1
60	9841,7712	9856,9341	9984,8371	10015,1628	0
		Sin. 46.		Tan. 46.	M

M	Sin. 44.		Tan. 44.	
0	9841,7712	9856,9341	9984,8371	10015,1628 60
1	9841,9020	9856,8120	9985,0900	10014,9100 59
2	9842,0327	9856,6899	9985,3428	10014,6572 58
3	9842,1634	9856,5677	9985,5956	10014,4043 57
4	9842,2939	9856,4455	9985,8484	10014,1515 56
5	9842,4244	9856,3232	9986,1012	10013,8987 55
6	9842,5548	9856,2008	9986,3540	10013,6460 54
7	9842,6851	9856,0783	9986,6067	10013,3932 53
8	9842,8154	9855,9558	9986,8595	10013,1404 52
9	9842,9455	9855,8332	9987,1123	10012,8876 51
10	9843,0756	9855,7105	9987,3651	10012,6349 50
11	9843,2057	9855,5878	9987,6178	10012,3821 49
12	9843,3356	9855,4650	9987,8706	10012,1293 48
13	9843,4655	9855,3421	9988,1234	10011,8766 47
14	9843,5953	9855,2191	9988,3761	10011,6238 46
15	9843,7250	9855,0961	9988,6289	10011,3711 45
16	9843,8546	9854,9730	9988,8816	10011,1183 44
17	9843,9842	9854,8498	9989,1344	10010,8656 43
18	9844,1137	9854,7266	9989,3871	10010,6128 42
19	9844,2431	9854,6033	9989,6398	10010,3601 41
20	9844,3725	9854,4799	9989,8926	10010,1074 40
21	9844,5017	9854,3564	9990,1453	10009,8546 39
22	9844,6309	9854,2329	9990,3980	10009,6019 38
23	9844,7600	9854,1093	9990,6507	10009,3492 37
24	9844,8891	9853,9856	9990,9035	10009,0965 36
25	9845,0181	9853,8618	9991,1562	10008,8437 35
26	9845,1469	9853,7380	9991,4089	10008,5910 34
27	9845,2758	9853,6141	9991,6616	10008,3383 33
28	9845,4045	9853,4902	9991,9143	10008,0856 32
29	9845,5332	9853,3661	9992,1670	10007,8329 31
30	9845,6618	9853,2420	9992,4197	10007,5802 30
	Sin. 45.		Tan. 45.	
				M



Sin. 44.		Tan. 44.	
30	9845,6618	9853,2420	9992,4197
31	9845,7903	9853,1178	9992,6724
32	9845,9187	9852,9936	9992,9251
33	9845,0471	9852,8693	9993,1778
34	9846,1754	9852,7449	9993,4305
35	9846,3036	9852,6204	9993,6832
36	9846,4317	9852,4958	9993,9359
37	9846,5598	9852,3712	9994,1886
38	9846,6878	9852,2465	9994,4412
39	9846,8157	9852,1218	9994,6939
40	9846,9436	9851,9969	9994,9466
41	9847,0713	9851,8720	9995,1993
42	9847,1991	9851,7471	9995,4520
43	9847,3267	9851,6220	9995,7047
44	9847,4542	9851,4969	9995,9573
45	9847,5817	9851,3717	9996,2100
46	9847,7091	9851,2464	9996,4627
47	9847,8364	9851,1211	9996,7153
48	9847,9637	9850,9957	9996,9680
49	9848,0909	9850,8702	9997,2207
50	9848,2180	9850,7446	9997,4733
51	9848,3450	9850,6190	9997,7260
52	9848,4720	9850,4933	9997,9787
53	9848,5988	9850,3675	9998,2313
54	9848,7257	9850,2416	9998,4840
55	9848,8524	9850,1157	9998,7367
56	9848,9790	9849,9897	9998,9893
57	9849,1056	9849,8636	9999,2420
58	9849,2321	9849,7375	9999,4946
59	9849,3586	9849,6113	9999,7473
60	9849,4850	9849,4850	10000,0000
Sin. 45.		Tan. 45.	

*Lectori practica Matheseos studio,*  
*S. P.*

**C**ANON noster vsum habet, in Triangulorum sphæricorum solutione, eundem quem tabulæ *Sinuum* rectorum & *Tangentium* ab alijs editæ, sed praxin paulo faciliorem. Nam eorum multiplicationem per additionem, & divisionem per subtractionem, & extractionem radicis quadratæ per bipartitionem evitamus.

Vt si datis tribus lateribus quærat<sup>r</sup>ur angulus, erit

Vt rectangulum sub *Sinibus* crurum,  
ad quadratum *Radij*:

Ita rectangulum sub *Sinibus* semisummæ trium laterû,  
& differentiæ inter hanc semisummam & basin,  
ad quadratum *Co-sinus* semianguli quæsit<sup>i</sup>.

Et in triangulo primæ paginæ *P Z S*, (referente Polum, Zenith, & Solem) datis lateribus, *P S Gr. 70*, & *Z P Gr. 38 M. 30*, & *Z S Gr. 40*, si quærat<sup>r</sup>ur angulus *P Z S*, cuius basis est *P S*: summa laterû erit *Gr. 148 M. 30*, semisumma *Gr. 74 M. 15*, differentia inter semisummam & basin *Gr. 4, M. 15*.

Hic nos pro quadrato *Radij* ponimus 20000, 0000 *Radij* duplum, cui addimus 9983, 3805 *Sinuum Gr. 74, M. 15*, & 8869, 8679 *Sinuum Gr. 4, M. 15*, fient 38853, 2484. Deinde pro rectangulo divisore addentes 9794, 1495 *Sinuum Gr. 38 M. 30*, & 9808, 0675 *Sinuum Gr. 40*, facimus 19602, 2170, & auferimus è 38853, 2484, ita restant 19251, 0314. Horum semissis est 9625, 5157 *Sinus* semianguli externi *Gr. 24, M. 58 S. 24*: & *Co-sinus* semianguli interni *Gr. 65, M. 1, S. 36*, & proinde totus angulus quæsitus est *Gr. 130, M. 3, S. 12*.

Quod

Quod si quis pro *Sinibus* auferendis addat eorum complementa ad *Radium*, non alia indigebit subtractione. Ut patere potest ex collatione vtriusque praxeos.

<i>Gr. M.</i>			
70	0		
38	30	9794,1495	205,8505
40	0	9808,0675	191,9325
148	30	19602,2170	
74	15	9983,3805	9983,3805
4	15	8869,8679	8869,8679
		20000,0000	
		38853,2484	
<i>Gr. M. S.</i>		19251,0314	<i>Gr. M. S.</i> 19251,0314
24	58 24	9625,5157	65 1 36 9625,5157
49	56 48		130 3 12

Eadem ratione, sed maiori compendio, solvuntur cætera quæ quæri solent in triangulis sphæricis, sine ope *Secantium* aut *Sinuum versorum*, ut pluribus non sit opus aut præceptis aut exemplis.

Idem si desideres in triangulis rectilineis, adiunge nostris, Amici & Collegæ *Henrici Briggij* Logarithmos. Nam eo nitimur fundamento, eodem utimur operandi modo.

Vale, & si hæc tibi grata fuerint, plura à nobis in hoc genere expecta.

FINIS.

V

1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766

717-7402 25 2 10 11-24-62 11 71 1

212



The first thousand Logarithmes  
now againe set foorth by the Author  
*Henrie Briggs* Professor of Geometrie in the Vni-  
uersitie of Oxford, who vndertooke this worke at the  
entreate, and with the approbation of the first In-  
venter of Logarithmes, worthy of all honor;  
*Iohn Nepeir* Baron of *Merchiston*.

**T**He Reader hath here a short view of those 30000  
Logarithmes, which are now coming forth in La-  
tin, and hereafter in English, which will afford vs,

The Quintessence of the Golden rule.

The valuation of Annuities, and the solution of all  
ordinary difficult questions of that kind.

The quantitie of any plaine Triangle, whose sides  
are giuen, together with the altitude thereof: the Dia-  
meters of the Circles inscribed and circumscribed; and  
the quantitie of any of the Angles.

The Diameter being giue, the circumference & Area  
of a Circle, and the Superficies and soliditie of a Globe.

The quantitie of any round Caske.

And so neare as may be, the squaring of a Circle, the  
cubing of a Globe, the doubling or tribling of a Cube.  
And in generall,

The enlarging or diminishing of any plaine or solid  
figure, keeping the same forme; or the transforming it  
in any proportion assigned.

The alteration of the sides of any giuen plaine Tri-  
angle, keeping the same Area, and the same Perimeter.

The describing of a Peripherie, euery point whereof  
shall frō the three angles of any giue Triangle, keep the  
distances according to any possible proportiōs assigned.

Hauiing two sides of a right angled Triangle giuen,  
to find the third: and generally all that may be found  
in all right lined Triangles whatsoever.

*In tenui sed non tenuis fructusve laboris.*

Nũ	Logarithm.	Nũ	Logarithm.	Nũ	Logarithm.
1	0	34	1531,47892	67	1826,07480
2	301,02999	35	1544,06804	68	1832,50891
3	477,12125	36	1556,30250	69	1838,84909
4	602,05999	37	1568,20172	70	1845,09804
5	698,97000	38	1579,78360	71	1851,25835
6	778,15125	39	1591,06461	72	1857,33250
7	845,09804	40	1602,05999	73	1863,32286
8	903,08999	41	1612,78386	74	1869,23172
9	954,24251	42	1623,24929	75	1875,06126
10	1000,00000	43	1633,46846	76	1880,81359
11	1041,39269	44	1643,45268	77	1886,49073
12	1079,18125	45	1653,21251	78	1892,09460
13	1113,94335	46	1662,75783	79	1897,62709
14	1146,12804	47	1672,09786	80	1903,08999
15	1176,09126	48	1681,24124	81	1908,48502
16	1204,11998	49	1690,19608	82	1913,81385
17	1230,44892	50	1698,97000	83	1919,07809
18	1255,27251	51	1707,57018	84	1924,27929
19	1278,75360	52	1716,00334	85	1929,41893
20	1301,02999	53	1724,27587	86	1934,49845
21	1322,21929	54	1732,39376	87	1939,51925
22	1342,42268	55	1740,36269	88	1944,48267
23	1361,72784	56	1748,18803	89	1949,39001
24	1380,21124	57	1755,87486	90	1954,24251
25	1397,94001	58	1763,42799	91	1959,04139
26	1414,97335	59	1770,85201	92	1963,78783
27	1431,36376	60	1778,15125	93	1968,48295
28	1447,15803	61	1785,32984	94	1973,12785
29	1462,39800	62	1792,39169	95	1977,72361
30	1477,12125	63	1799,34055	96	1982,27123
31	1491,36169	64	1806,17997	97	1986,77173
32	1505,14998	65	1812,91336	98	1991,22608
33	1518,51394	66	1819,54394	99	1995,63519
34	1531,47892	67	1826,07480	100	2000,00000

N <sup>o</sup> .	Logarithm.	Differ.	N <sup>o</sup> .	Logarithm.	Differ.
101	2004,32137	427880	134	2127,10480	322897
102	2008,60017	423705	135	2130,33377	320514
103	2012,83722	419612	136	2133,53891	318166
104	2017,03334	415596	137	2136,72057	315852
105	2021,18930	411657	138	2139,87909	313571
106	2025,30587	407791	139	2143,01480	311324
107	2029,38378	403998	140	2146,12804	309107
108	2033,42376	400274	141	2149,21911	306923
109	2037,42650	396619	142	2152,28834	304770
110	2041,39269	393029	143	2155,33604	302645
111	2045,32298	389504	144	2158,36249	300551
112	2049,21802	386042	145	2161,36800	298486
113	2053,07844	382641	146	2164,35286	296447
114	2056,90485	379299	147	2167,31733	294439
115	2060,69784	376015	148	2170,26172	292455
116	2064,45799	372787	149	2173,18627	290499
117	2068,18586	369615	150	2176,09126	288569
118	2071,88201	366495	151	2178,97695	286664
119	2075,54696	363429	152	2181,84359	284784
120	2079,18125	360412	153	2184,69143	282929
121	2082,78537	357446	154	2187,52072	281098
122	2086,35983	354528	155	2190,33170	279290
123	2089,90511	351658	156	2193,12460	277505
124	2093,42169	348832	157	2195,89965	275744
125	2096,91001	346054	158	2198,65709	274003
126	2100,37055	343317	159	2201,39712	272286
127	2103,80372	340625	160	2204,11998	270590
128	2107,20997	337974	161	2206,82588	268913
129	2110,58971	335364	162	2209,51501	267259
130	2113,94335	332795	163	2212,18760	265625
131	2117,27130	330263	164	2214,84385	264009
132	2120,57393	327771	165	2217,48394	262415
133	2123,85164	325316	166	2220,10809	260838
134	2127,10480	322897	167	2222,71647	259281

Nũ	Logarithm.	Differ.	Nũ	Logarithm.	Differ.
167	2222,71647	259281	201	2303,19606	215531
168	2225,30928	257742	202	2305,35137	214467
169	2227,88670	256222	203	2307,49604	213413
170	2230,44892	254719	204	2309,63017	212369
171	2232,99611	253234	205	2311,75386	211336
172	2235,52845	251765	206	2313,86722	210313
173	2238,04610	250315	207	2315,97035	209298
174	2240,54925	248880	208	2318,06333	208296
175	2243,03805	247462	209	2320,14629	207300
176	2245,51267	246060	210	2322,21929	206317
177	2247,97327	244673	211	2324,28246	205340
178	2250,42000	243303	212	2326,33586	204374
179	2252,85303	241948	213	2328,37960	203417
180	2255,27251	240606	214	2330,41377	202469
181	2257,67857	239282	215	2332,43846	201529
182	2260,07139	237970	216	2334,45375	200598
183	2262,45109	236673	217	2336,45973	199676
184	2264,81782	235391	218	2338,45649	198762
185	2267,17173	234121	219	2340,44411	197857
186	2269,51294	232867	220	2342,42268	196959
187	2271,84161	231624	221	2344,39227	196070
188	2274,15785	230395	222	2346,35297	195189
189	2276,46180	229180	223	2348,30486	194316
190	2278,75360	227977	224	2350,24802	193450
191	2281,03337	226786	225	2352,18252	192592
192	2283,30123	225608	226	2354,10844	191742
193	2285,55731	224442	227	2356,02586	190899
194	2287,80173	223288	228	2357,93485	190063
195	2290,03461	222146	229	2359,83548	189236
196	2292,25607	221016	230	2361,72784	188414
197	2294,46623	219896	231	2363,61198	187600
198	2296,66519	218789	232	2365,48798	186794
199	2298,85308	217691	233	2367,35592	185994
200	2301,02999	216606	234	2369,21586	185200



Nũ	Logarithm.	Differ.	Nũ	Logarithm.	Differ.
234	2369,21586	185200	267	2426,51126	162353
235	2371,06786	184414	268	2428,13479	161749
236	2372,91200	183635	269	2429,75228	161148
237	2374,74835	182861	270	2431,36376	160553
238	2376,57696	182094	271	2432,96929	159961
239	2378,39790	181334	272	2434,56890	159375
240	2380,21124	180580	273	2436,16265	158791
241	2382,01704	179833	274	2437,75056	158213
242	2383,81537	179090	275	2439,33269	157639
243	2385,60627	178356	276	2440,90908	157069
244	2387,38983	177625	277	2442,47977	156503
245	2389,16608	176903	278	2444,04480	155940
246	2390,93511	176184	279	2445,60420	155383
247	2392,69695	175473	280	2447,15803	154829
248	2394,45168	174767	2 1	2448,70632	154279
249	2396,19935	174066	2 2	2450,24911	153733
250	2397,94001	173371	283	2451,78644	153190
251	2399,67372	172682	284	2453,31834	152652
252	2401,40054	171998	285	2454,84486	152117
253	2403,12052	171320	286	2456,36603	151587
254	2404,83372	170646	287	2457,88190	151059
255	2406,54018	169979	288	2459,39249	150535
256	2408,23997	169315	289	2460,89784	150016
257	2409,93312	168659	290	2462,39800	149499
258	2411,61971	168005	291	2463,89299	148986
259	2413,29976	167359	292	2465,38285	148477
260	2414,97335	166716	293	2466,86762	147971
261	2416,64051	166078	294	2468,34733	147469
262	2418,30129	165446	295	2469,82202	146969
263	2419,95575	164818	296	2471,29171	146474
264	2421,60393	164194	297	2472,75645	145981
265	2423,24587	163577	298	2474,21626	145493
266	2424,88164	162962	299	2475,67119	145006
267	2426,51126	162353	300	2477,12125	144524

N <sup>o</sup>	Logarithm.	Differ.	N <sup>o</sup>	Logarithm.	Differ.
301	2478,56650	144044	334	2523,74647	129834
302	2480,00694	143569	335	2525,04481	129447
303	2481,44263	143095	336	2526,33928	129062
304	2482,87358	142626	337	2527,62990	128680
305	2484,29984	142159	338	2528,91670	128300
306	2485,72143	141695	339	2530,19970	127922
307	2487,13838	141234	340	2531,47892	127546
308	2488,55072	140776	341	2532,75438	127173
309	2489,95848	140321	342	2534,02611	126801
310	2491,36169	139470	343	2535,29412	126432
311	2492,76039	139320	344	2536,55844	126066
312	2494,15459	138975	345	2537,81910	125700
313	2495,54434	138531	346	2539,07610	125337
314	2496,92965	138090	347	2540,32947	124977
315	2498,31055	137653	348	2541,57924	124619
316	2499,68708	137218	349	2542,82543	124261
317	2501,05926	136786	350	2544,06804	123908
318	2502,42712	136356	351	2545,30712	123554
319	2503,79068	135930	352	2546,54266	123205
320	2505,14998	135505	353	2547,77471	122855
321	2506,50503	135084	354	2549,00326	122509
322	2507,85587	134665	355	2550,22835	122165
323	2509,20252	134249	356	2551,45000	121822
324	2510,54501	133835	357	2552,66822	121481
325	2511,88336	133424	358	2553,88303	121142
326	2513,21760	133015	359	2555,09445	120805
327	2514,54775	132609	360	2556,30250	120470
328	2515,87384	132206	361	2557,50720	120137
329	2517,19590	131804	362	2558,70857	119806
330	2518,51394	131405	363	2559,90663	119475
331	2519,82799	131009	364	2561,10138	119148
332	2521,13808	130615	365	2562,29286	118823
333	2522,44423	130224	366	2563,48109	118497
334	2523,74647	129834	367	2564,66606	118176

N <sup>o</sup>	Logarithms.	Differ.	N <sup>o</sup>	Logarithms.	Differ.
367	2564,66606	118176	401	2603,14437	108168
368	2565,84782	117855	402	2604,22605	107900
369	2567,02637	117535	403	2605,30505	107632
370	2568,20172	117219	404	2606,38137	107365
371	2569,37391	116903	405	2607,45502	107101
372	2570,54294	116589	406	2608,52603	106838
373	2571,70883	116277	407	2609,59441	106575
374	2572,87160	115967	408	2610,66016	106315
375	2574,03127	115657	409	2611,72331	106055
376	2575,18784	115351	410	2612,78386	105796
377	2576,34135	115045	411	2613,84182	105540
378	2577,49180	114741	412	2614,89722	105283
379	2578,63921	114439	413	2615,95005	105029
380	2579,78360	114138	414	2617,00034	104776
381	2580,92498	113838	415	2618,04810	104523
382	2582,06336	113541	416	2619,09333	104272
383	2583,19877	113245	417	2620,13605	104023
384	2584,33122	112951	418	2621,17628	103774
385	2585,46073	112657	419	2622,21402	103527
386	2586,58730	112367	420	2623,24929	103281
387	2587,71097	112076	421	2624,28210	103035
388	2588,83173	111787	422	2625,31245	102792
389	2589,94960	111501	423	2626,34037	102549
390	2591,06461	111215	424	2627,36586	102307
391	2592,17676	110931	425	2628,38893	102067
392	2593,28607	110648	426	2629,40960	101828
393	2594,39255	110367	427	2630,42788	101589
394	2595,49622	110088	428	2631,44377	101352
395	2596,59710	109809	429	2632,45729	101117
396	2597,69519	109532	430	2633,46846	100881
397	2598,79051	109256	431	2634,47727	100648
398	2599,88307	108983	432	2635,48375	100415
399	2600,97290	108709	433	2636,48790	100183
400	2602,05999	108438	434	2637,48973	99953

Nu.	Logarith.	Differ.
434	2637,48973	99953
435	2638,48926	99723
436	2639,48649	99495
437	2640,48144	99267
438	2641,47411	99041
439	2642,46452	98816
440	2643,45268	98591
441	2644,43859	98368
442	2645,42227	98146
443	2646,40373	97924
444	2647,38297	97704
445	2648,36001	97485
446	2649,33486	97266
447	2650,30752	97049
448	2651,27801	96833
449	2652,24634	96617
450	2653,21251	96403
451	2654,17654	96189
452	2655,13843	95977
453	2656,09820	95765
454	2657,05585	95555
455	2658,01140	95344
456	2658,96484	95136
457	2659,91620	94928
458	2660,86548	94721
459	2661,81269	94514
460	2662,75783	94310
461	2663,70093	94105
462	2664,64198	93901
463	2665,58099	93699
464	2666,51798	93497
465	2667,45295	93297
466	2668,38592	93096
467	2669,31688	92897

Nu.	Logarithm.	Differ.
467	2669,31688	92897
468	2670,24585	92699
469	2671,17284	92502
470	2672,09786	92305
471	2673,02091	92109
472	2673,94200	91914
473	2674,86114	91720
474	2675,77834	91527
475	2676,69361	91334
476	2677,60695	91143
477	2678,51838	90952
478	2679,42790	90761
479	2680,33551	90573
480	2681,24124	90384
481	2682,14508	90196
482	2683,04704	90009
483	2683,94713	89823
484	2684,84536	89638
485	2685,74174	89453
486	2686,63627	89269
487	2687,52896	89086
488	2688,41982	88904
489	2689,30886	88722
490	2690,19608	88541
491	2691,08149	88361
492	2691,96510	88182
493	2692,84692	88003
494	2693,72695	87825
495	2694,60520	87648
496	2695,48168	87471
497	2696,35639	87295
498	2697,22934	87121
499	2698,10055	86945
500	2698,97000	86772



N <sup>o</sup>	Logarithm.	Differ.	N <sup>o</sup> .	Logarithm.	Differ.
501	2699,83773	86599	534	2727,54126	81252
502	2700,70372	86427	535	2728,35378	81101
503	2701,56799	86255	536	2729,16479	80950
504	2702,43054	86084	537	2729,97429	80799
505	2703,29138	85914	538	2730,78228	80649
506	2704,15052	85744	539	2731,58877	80499
507	2705,00796	85575	540	2732,39376	80351
508	2705,86371	85407	541	2733,19727	80202
509	2706,71778	85240	542	2733,99929	80054
510	2707,57018	85072	543	2734,79983	79907
511	2708,42090	84906	544	2735,59890	79760
512	2709,26996	84741	545	2736,39650	79614
513	2710,11737	84575	546	2737,19264	79469
514	2710,96312	84411	547	2737,98733	79323
515	2711,80723	84247	548	2738,78056	79178
516	2712,64970	84084	549	2739,57234	79035
517	2713,49054	83922	550	2740,36269	78891
518	2714,32976	83760	551	2741,15160	78748
519	2715,16736	83598	552	2741,93908	78605
520	2716,00334	83438	553	2742,72513	78463
521	2716,83772	83278	554	2743,50976	78322
522	2717,67050	83119	555	2744,29298	78181
523	2718,50169	82960	556	2745,07479	78041
524	2719,33129	82801	557	2745,85520	77900
525	2720,15930	82644	558	2746,63420	77761
526	2720,98574	82488	559	2747,41181	77622
527	2721,81062	82330	560	2748,18803	77483
528	2722,63392	82175	561	2748,96286	77346
529	2723,45567	82020	562	2749,73632	77207
530	2724,27587	81865	563	2750,50839	77071
531	2725,09452	81711	564	2751,27910	76935
532	2725,91163	81558	565	2752,04845	76798
533	2726,72721	81405	566	2752,81643	76663
534	2727,54126	81252	567	2753,58306	76528

N <sup>o</sup>	Logarithm.	Differ.	N <sup>o</sup>	Logarithm.	Differ.
567	2753,58306	76528	601	2778,87447	72202
568	2754,34834	76393	602	2779,59649	72082
569	2755,11227	76259	603	2780,31731	71963
570	2755,87486	76125	604	2781,03694	71843
571	2756,63611	75992	605	2781,75537	71725
572	2757,39603	75859	606	2782,47262	71607
573	2758,15461	75727	607	2783,18869	71489
574	2758,91189	75595	608	2783,90358	71371
575	2759,66784	75464	609	2784,61729	71255
576	2750,42248	75333	610	2785,32984	71137
577	2761,17581	75203	611	2786,04121	71021
578	2761,92784	75072	612	2786,75142	70905
579	2762,67856	74943	613	2787,46047	70790
580	2763,42799	74814	614	2788,16837	70675
581	2764,17613	74685	615	2788,87512	70559
582	2764,92298	74557	616	2789,58071	70445
583	2765,66855	74430	617	2790,28516	70332
584	2766,41285	74302	618	2790,98848	70217
585	2767,15587	74175	619	2791,69065	70104
586	2767,89762	74048	620	2792,39169	69991
587	2768,63810	73923	621	2793,09160	69878
588	2769,37733	73796	622	2793,79038	69767
589	2770,11529	73672	623	2794,48805	69654
590	2770,85201	73547	624	2795,18459	69543
591	2771,58748	73423	625	2795,88002	69431
592	2772,32171	73298	626	2796,57433	69321
593	2773,05465	73175	627	2797,26754	69210
594	2773,78644	73053	628	2797,95964	69101
595	2774,51697	72929	629	2798,65065	68990
596	2775,24626	72807	630	2799,34055	68881
597	2775,97433	72685	631	2800,02936	68772
598	2776,70118	72564	632	2800,71708	68663
599	2777,42682	72443	633	2801,40371	68555
600	2778,15125	72322	634	2802,08926	68447

N <sup>o</sup> .	Logarithm.	Differ.	N <sup>o</sup> .	Logarithm.	Differ.
634	2802,08926	68447	667	2824,12583	65063
635	2802,77373	68339	668	2824,77646	64966
636	2803,45712	68231	669	2825,42612	64868
637	2804,13943	68125	670	2826,07480	64772
638	2804,82068	68018	671	2826,72152	64675
639	2805,50086	67911	672	2827,36927	64579
640	2806,17997	67806	673	2828,01506	64484
641	2806,85803	67700	674	2828,65990	64387
642	2807,53503	67594	675	2829,30377	64293
643	2808,21097	67490	676	2829,94670	64197
644	2808,88587	67384	677	2830,58867	64102
645	2809,55971	67281	678	2831,22969	64008
646	2810,23252	67176	679	2831,86977	63914
647	2810,90428	67073	680	2832,50891	63820
648	2811,57501	66969	681	2833,14711	63726
649	2812,24470	66866	682	2833,78437	63633
650	2812,91336	66763	683	2834,42070	63540
651	2813,58099	66661	684	2835,05610	63447
652	2814,24760	66558	685	2835,69057	63355
653	2814,91318	66457	686	2836,32412	63262
654	2815,57775	66355	687	2836,95674	63170
655	2816,24130	66254	688	2837,58844	63078
656	2816,90384	66153	689	2838,21922	62987
657	2817,56537	66052	690	2838,84909	62896
658	2818,22589	65952	691	2839,47805	62804
659	2818,88541	65853	692	2840,10609	62714
660	2819,54394	65752	693	2840,73323	62624
661	2820,20146	65653	694	2841,35947	62533
662	2820,85799	65554	695	2841,98480	62444
663	2821,51353	65455	696	2842,60924	62354
664	2822,16808	65357	697	2843,23278	62264
665	2822,82165	65258	698	2843,85542	62176
666	2823,47423	65160	699	2844,47718	62086
667	2824,12583	65063	700	2845,09804	61998

N <sup>o</sup>	Logarithm.	Differ.	N <sup>o</sup>	Logarithm.	Differ.
701	2845,718c2	61909	734	2865,69606	59128
702	2846,33711	61822	735	2866,28734	59047
703	2846,95533	61733	736	2866,87781	58968
704	2847,57266	61646	737	2867,46749	58887
705	2848,18912	61558	738	2868,05636	58808
706	2848,80470	61471	739	2868,64444	58728
707	2849,41941	61385	740	2869,23172	58649
708	2850,03326	61298	741	2869,81821	58570
709	2850,64624	61211	742	2870,40391	58490
710	2851,25835	61125	743	2870,98881	58412
711	2851,86960	61039	744	2871,57294	58334
712	2852,47999	60954	745	2872,15627	58256
713	2853,08953	60868	746	2872,73883	58177
714	2853,69821	60783	747	2873,32060	58100
715	2854,30604	60698	748	2873,90160	58022
716	2854,91302	60614	749	2874,48182	57944
717	2855,51916	60528	750	2875,06126	57868
718	2856,12444	60445	751	2875,63994	57790
719	2856,72889	60361	752	2876,21784	57714
720	2857,33250	60276	753	2876,79498	57638
721	2857,93526	60194	754	2877,37135	57560
722	2858,53720	60110	755	2877,94695	57484
723	2859,13830	60027	756	2878,52180	57408
724	2859,73857	59944	757	2879,09588	57333
725	2860,33801	59862	758	2879,66921	57257
726	2860,93662	59777	759	2880,24178	57181
727	2861,53441	59697	760	2880,81359	57107
728	2862,13138	59615	761	2881,38466	57031
729	2862,72753	59533	762	2881,95497	56957
730	2863,32286	59452	763	2882,52454	56882
731	2863,91738	59370	764	2883,09336	56808
732	2864,51108	59289	765	2883,66144	56733
733	2865,10397	59209	766	2884,22877	56659
734	2865,69606	59128	767	2884,79536	56586



N <sup>o</sup>	Logarithm.	Differ.	N <sup>o</sup>	Logarithm.	Differ.
767	2884,79536	56586	801	2903,63252	54185
768	2885,36122	56512	802	2904,17437	54118
769	2885,92634	56439	803	2904,71555	54050
770	2886,49073	56365	804	2905,25605	53983
771	2887,05438	56292	805	2905,79588	53916
772	2887,61730	56219	806	2906,33504	53849
773	2888,17949	56147	807	2906,87353	53783
774	2888,74096	56074	808	2907,41136	53716
775	2889,30170	56002	809	2907,94852	53650
776	2889,86172	55930	810	2908,48502	53583
777	2890,42102	55858	811	2909,02085	53518
778	2890,97960	55786	812	2909,55603	53452
779	2891,53746	55714	813	2910,09055	53385
780	2892,09460	55643	814	2910,62440	53321
781	2892,65103	55572	815	2911,15761	53255
782	2893,20675	55501	816	2911,69016	53190
783	2893,76176	55430	817	2912,22206	53124
784	2894,31606	55360	818	2912,75330	53060
785	2894,86966	55289	819	2913,28390	52995
786	2895,42255	55218	820	2913,81385	52931
787	2895,97473	55149	821	2914,34316	52866
788	2896,52622	55078	822	2914,87182	52802
789	2897,07700	55009	823	2915,39984	52737
790	2897,62709	54939	824	2915,92721	52674
791	2898,17648	54870	825	2916,45395	52610
792	2898,72518	54801	826	2916,98005	52546
793	2899,27319	54731	827	2917,50551	52483
794	2899,82050	54663	828	2918,03034	52419
795	2900,36713	54594	829	2918,55453	52356
796	2900,91307	54525	830	2919,07809	52293
797	2901,45832	54457	831	2919,60102	52231
798	2902,00280	54389	832	2920,12333	52167
799	2902,54678	54321	833	2920,64500	52105
800	2903,08999	54253	834	2921,16605	52043

Nu	Logarithm.	Differ.	Nu	Logarithm.	Differ.
834	2921,16605	52043	867	2938,01910	50063
835	2921,68648	51980	868	2938,51973	50005
836	2922,20627	51918	869	2939,01978	49947
837	2922,72546	51856	870	2939,51925	49891
838	2923,24402	51794	871	2940,01816	49832
839	2923,76196	51733	872	2940,51648	49776
840	2924,27929	51671	873	2941,01424	49719
841	2924,79600	51609	874	2941,51143	49662
842	2925,31209	51548	875	2942,00805	49606
843	2925,82757	51488	876	2942,50411	49548
844	2926,34245	51426	877	2942,99959	49493
845	2926,85671	51365	878	2943,49452	49436
846	2927,37036	51305	879	2943,98888	49379
847	2927,88341	51244	880	2944,48267	49324
848	2928,39585	51184	881	2944,97591	49268
849	2928,90769	51124	882	2945,46859	49211
850	2929,41893	51063	883	2945,96070	49157
851	2929,92956	51003	884	2946,45227	49100
852	2930,43959	50944	885	2946,94327	49045
853	2930,94903	50884	886	2947,43372	48990
854	2931,45787	50824	887	2947,92362	48935
855	2931,96611	50765	888	2948,41297	48879
856	2932,47376	50706	889	2948,90176	48825
857	2932,98082	50647	890	2949,39001	48769
858	2933,48729	50587	891	2949,87770	48715
859	2933,99316	50529	892	2950,36485	48661
860	2934,49845	50470	893	2950,85146	48606
861	2935,00315	50412	894	2951,33752	48552
862	2935,50727	50353	895	2951,82304	48497
863	2936,01080	50294	896	2952,30801	48443
864	2936,51374	50237	897	2952,79244	48390
865	2937,01611	50178	898	2953,27634	48335
866	2937,51789	50121	899	2953,75969	48282
867	2938,01910	50063	900	2954,24251	48228

N <sup>o</sup>	Logarithm.	Differ.	N <sup>o</sup>	Logarithm.	Differ.
901	2954,72479	48175	934	2970,34688	46473
902	2955,20654	48121	935	2970,81161	46424
903	2955,68775	48068	936	2971,27585	46374
904	2956,16843	48015	937	2971,73959	46325
905	2956,64858	47962	938	2972,20284	46275
906	2957,12820	47909	939	2972,66559	46226
907	2957,60729	47856	940	2973,12785	46177
908	2958,08585	47803	941	2973,58962	46128
909	2958,56388	47751	942	2974,05090	46079
910	2959,04139	47699	943	2974,51169	46030
911	2959,51838	47646	944	2974,97199	45982
912	2959,99484	47594	945	2975,43181	45933
913	2960,47078	47542	946	2975,89114	45884
914	2960,94620	47489	947	2976,34998	45836
915	2961,42109	47438	948	2976,80834	45787
916	2961,89547	47387	949	2977,26621	45740
917	2962,36934	47334	950	2977,72361	45691
918	2962,84268	47283	951	2978,18052	45643
919	2963,31551	47232	952	2978,63695	45595
920	2963,78783	47180	953	2979,09290	45547
921	2964,25963	47129	954	2979,54837	45500
922	2964,73092	47078	955	2980,00337	45452
923	2965,20170	47027	956	2980,45789	45405
924	2965,67197	46976	957	2980,91194	45357
925	2966,14173	46926	958	2981,36551	45310
926	2966,61099	46874	959	2981,81861	45262
927	2967,07973	46825	960	2982,27123	45216
928	2967,54798	46773	961	2982,72339	45168
929	2968,01571	46724	962	2983,17507	45122
930	2968,48295	46673	963	2983,62629	45074
931	2968,94968	46623	964	2984,07703	45028
932	2969,41591	46573	965	2984,52731	44982
933	2969,88164	46524	966	2984,97713	44934
934	2970,34688	46473	967	2985,42647	44889

N <sup>o</sup>	Logarithm.	Differ.	N <sup>o</sup>	Logarithm.	Differ.
967	2985,42647	44889	984	2992,99510	44113
968	2985,87536	44842	985	2993,43623	44068
969	2986,32378	44795	986	2993,87691	44024
970	2986,77173	44750	987	2994,31715	43979
971	2987,21923	44703	988	2994,75694	43935
972	2987,66626	44658	989	2995,19629	43890
973	2988,11284	44612	990	2995,63519	43846
974	2988,55896	44566	991	2996,07365	43802
975	2989,00462	44520	992	2996,51167	43758
976	2989,44982	44474	993	2996,94925	43713
977	2989,89456	44429	994	2997,38638	43670
978	2990,33885	44384	995	2997,82308	43626
979	2990,78269	44339	996	2998,25934	43582
980	2991,22608	44293	997	2998,69516	43538
981	2991,66901	44248	998	2999,13054	43495
982	2992,11149	44203	999	2999,56549	43451
983	2992,55352	44158	1000	3000,00000	

FINIS.



# Calculus triangulorum sphericorum.

## De Rectangulis.

### Regulae.

ut	ad	ita	ad
1. R,	SDC 1.	SDC 2.	S D B.
2. R,	SDB;	TO 1.	TDO 2.
3. R,	SB;	SO 1.	SC 1.
4. R,	TDC 1.	SDO 2.	T D B.
5. R,	TO 1.	SC 2.	T C 1.
6. R,	SDC 1.	SO 2.	SDO 1.

### Significatio literarum.

R, Radius, id est Sinus anguli recti, seu Sinus totus.

B, Basis, id est latus angulo recto oppositum.

C, Crus, id est latus angulo recto adiacens.

O, Obliquus, id est angulus non rectus.

S, Sinus rectus. T, Tangens.

D, Differentia, id est Complementi.

Nota Arithmetica 1. 2. distinctionis gratia appositae sunt duobus Cruribus, duobus-ve Obliquis, quando eandem regulam sine partibus sibi oppositis ingrediuntur: at quando eadem in regulâ una & eadem eiusmodi notarum appositae est Cruri, & Obliquo, significat Crus, & Obliquum ab illo subtensum; quando vero diuersae significant Crus, & Obliquum illi adiacentem.

### De Quadrantalibus.

Quadrantale triangulum solues, permutando ipsum cum Rectangulo. Omni siquidem Quadrantali Rectangulum aliquod respondet cum quo reciproce aequales habet angulos, & arcus seu latera, hoc solo discrimine, quod latus subtendens Rectum in Rectangulo, & Obliquus Quadranti oppositus in Quadrantali sunt diuersae speciei.

### De neque Rectangulis neque Quadrantalibus.

Eiusmodi trianguli latere quocunq; deorsum constituto ut Basi, reliqua latera Crura vocantur, & dextrum quidem illud, quod ad dextram est, sinistrum autem quod ad sinistram: & angulus lateri deorsum constituto, seu Basi oppositus, dicitur Verticalis, duo reliqui appellantur anguli supra basim, vnus dexter, alter sinister, sicut Crura.

*Regula.*

1. Vt *Sinus* anguli vnus, ad *Sinum* lateris ei oppositi; ita *Sinus* anguli alius cuiusuis, in eodem triangulo, ad *Sinum* lateris illi quoque oppositi.

2. Vt *Sinus* complementi anguli dextri eorum qui supra *Basim*, ad *Sinum* complementi anguli sinistri; ita *Sinus* anguli dextri eorum qui fiunt à perpendiculari & *Cruribus*, ad *Sinum* sinistri.

3. Vt *Tangens* complementi anguli dextri eorum qui supra *Basim*, ad *Tangentem* complementi anguli sinistri; ita *Sinus* *Casus* dextri, ad *Sinum* sinistri.

*Demisso perpendiculari ex angulo Verticali in Basim, segmenta Basis à Cruribus, & perpendiculari comprehensa dicuntur Casus, vnus dexter, qui dextero Cruri adiacet, alter sinister, qui sinistro: & idem dic de angulis duobus Verticalibus qui à perpendiculari & Cruribus fiunt.*

4. Vt *Sinus* complementi *Cruris* dextri, ad *Sinum* complementi *Cruris* sinistri; ita *Sinus* complementi *Casus* dextri, ad *Sinum* complementi *Casus* sinistri.

5. Vt *Tangens* complementi *Cruris* dextri, ad *Tangentem* complementi *Cruris* sinistri; ita *Sinus* complementi anguli dextri eorum qui à perpendiculari & *Cruribus* comprehenduntur, ad *Sinum* complementi anguli sinistri.

6. Vt *Tangens* complementi semianguli Verticalis veri, ad *Tangentem* semisummam angulorum qui supra *Basim*; ita *Tangens* semidifferentiæ eorundem, ad *Tangentem* semianguli Verticalis alterni.

7. Vt *Tangens* semibasis veræ, ad *Tangentem* semisummam *Crurum*; ita *Tangens* semidifferentiæ eorundem, ad *Tangentem* semibasis alternæ.

*Basis vera est dati trianguli latus illud in quod perpendicularis cadit. Basis alterna est differentia Casuum, cadente perpendiculari intra triangulum; & tunc Basis vera est eorundem summa: cadente autem perpendiculari extra triangulum, Basis alterna est summa Casuum; & tunc Basis vera est eorundem differentia. Vnde summa semibasium est Casus maior, eorum autem differentia est Casus minor. Et idem proportionem dic de angulis Verticalibus oppositis.*

8. Vt maior *Sinum* summæ, & differentiæ angulorum qui supra Basim, ad minorem dictorum *Sinum*; ita *Tangens* semisummæ Casuum, ad *Tangentem* semidifferentiæ eorundem.

9. Vt maior *Sinum* summæ, & differentiæ Crurum, ad minorem; ita, vel, *Tangens* complementi semisummæ angulorum à perpendiculari & Cruribus factorum, ad *Tangentem* semidifferentiæ eorundem, si ipsi sint eiusdem speciei; vel, *Tangens* semisummæ, ad *Tangentem* complementi semidifferentiæ, si fuerint diuersæ speciei.

10. Vt rectangulum sub *Sinibus* angulorum qui supra Basim, ad quadratum *Radij*; ita rectangulum sub *Sinibus* summæ, & differentiæ duorum angulorum, quorum alter est semidifferentia prædictorum angulorum qui supra Basim, alter est complementum semianguli Verticalis, ad quadratum *Sinus* complementi semibasis.

11. Vt rectangulum sub *Sinibus* Crurum, ad quadratum *Radij*; ita rectangulum sub *Sinibus* summæ, & differentiæ semibasis, & semidifferentiæ Crurum, ad quadratum *Sinus* semianguli Verticalis.

### *De specie partium trianguli sphaerici.*

#### *Regula.*

1. Quilibet angulus qui non sit triumproximus 90. gradibus, est eiusdem speciei cuius est latus illi oppositum.

2. Si in triangulo angulus aliquis sit 90. gradibus propinquior, quàm latus sibi oppositum, erunt duo talis trianguli latera eiusdem speciei, & tertium quadrante minus.

3. Si in triangulo latus aliquod sit 90. gradibus propinquius, quàm angulus quem subtendit, erunt talis trianguli duo anguli eiusdem speciei, & tertius obtusus.

4. Perpendicularis cadit intra triangulum, si anguli qui supra Basim, sint eiusdem speciei; extra, si diuersæ.

5. Si dictorum angulorum vnus sit acutus, & Crus illi adiacens quadrante maius sit, denique summa Crurum non sit minor semicirculo, alter talium angulorum erit obtusus.

11. Si eorundem angulorum vnus sit obtusus, & Crus illi adiacens quadrante minus sit, denique summa Crurum sit minor semicirculo, alter talium angulorum erit acutus.

## Calculus triangulorum reſtilineorum planorum.

### De Reſtangulis.

#### Regulæ.

- |       |       |      |      |   |
|-------|-------|------|------|---|
| 1. R. | TO 1. | C 2. | C 1. | } Significatio literarum eſt hic eadem<br>quæ ſupra in ſphæricis. |
| 2. R. | SO 1. | B,   | C 1. |   |

¶ Vt vnum ex Cruribus, ad alterum; ita hoc alterum Crus, ad tertium quoddam proportionale.

5. } Deinde  
¶ Vt prius Crus, ad Baſim; ita Baſis eadem, ad ſummam prioris Cruris, & tertii proportionalis prædicti.

4. Vt ſumma Baſis, & vnus ex Cruribus, ad Crus alterum; ita Crus hoc alterum, ad differentiã Baſis, & prioris Cruris.

### De non Reſtangulis.

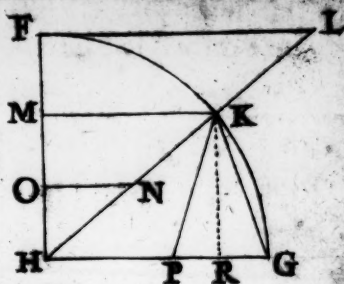
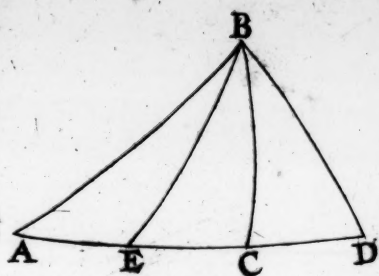
#### Regulæ.

1. Vt Sinus vnus anguli, ad latus oppoſitũ; ita Sinus anguli cuiuſuis alius in eodem triangulo, ad latus illi oppoſitum.
2. Vt ſumma Crurum, ad differentiam illorum; ita Tangens complementi ſemianguli Verticalis, ad Tangentem ſemidifferentiæ duorum reliquorum angulorum.
3. Vt vera Baſis, ad ſummam Crurum; ita differentia illorum, ad Baſim alternam.

Baſes vera, & alterna, Crura, & Caſus hic ſumuntur, vt ſupra in ſphæricis.

Angulus oppoſitus lateri non maximo ſemper eſt acutus: qui autẽ maximo lateri opponitur, modò acutus, modò obtuſus, modò etiam reſtus eſt: acutus eſt, quando radix quadrata reſtanguli continet ſub ſumma & differentia maximæ & alterutrius non maximorum eſt minor altero non maximo; obtuſus, quãdo eſt maior; reſtus denique, quãdo eſt illi equalis.





In schemate sinistro, quod est pro sphæricis, triangulum ABC, est rectangulum in C, eritque proinde paradigma pro rectangulis. Triangula autem ABD, ABE, neque rectangula neque quadrantalia sunt, vnde exemplum erunt pro neque rectangulis neque quadrantalibus. Casus igitur sunt AC, CD. Sumptis ergo CD, CE, æqualibus, si datum sit triangulum ABD, intra quod cadit perpendicularis BC, erit AD, vera Basis, & ABD, angulus Verticalis verus; AE, autem erit Basis alterna, & ABE, angulus Verticalis alternus: at si datum fuerit triangulum ABE, extra quod cadit dictus perpendicularis, erit AE, vera Basis, & ABE, angulus Verticalis verus; AD, autem erit Basis alterna, & ABD, angulus Verticalis alternus.

In schemate autem dextro, quod est pro rectilineis planis, triangulum HNO, est rectangulum in O, proindeq; erit pro rectangulis: vbi apparet quoque demonstratio duarum priorum regularum ex 4. sexti: erit enim, vt HF, Radius, ad FL, Tangentem anguli NHO, ita HO, Crus adiacens, ad NO, Crus oppositum. Item, vt HK, Radius, ad KM, Sinum anguli NHO, predicti; ita HN, Basis, ad NO, Crus oppositum. Triangula autem obliquangula GHK, HKP, erunt pro non rectangulis: datoque triangulo GHK, intra quod cadit KR, perpendicularis, erit GH, vera Basis, & GKH, angulus Verticalis verus; HP, verò, Basis alterna, & HKP, angulus Verticalis alternus: at dato triangulo HKP, extra quod cadit perpendicularis, erit HP Basis vera, & HKP, angulus Verticalis verus; GH, autem Basis alterna, & GKH, angulus Verticalis alternus.



